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PUBLIC ENTERPRISE
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projektovanje i inženjering

DROMOS consulting

Hidrozavod dd

RSSP/CS3-IB29PS/2015-10

Project name:

ROAD REHABILITATION AND SAFETY PROJECT (RRSP)

STATE ROAD IB No. 29,
SECTION: PRIJEPOLJE – SJENICA 3 (MERDARE),
L=13.83 km

MAIN PROJECT OF HEAVY MAINTENANCE

ENVIRONMENTAL MANAGEMENT PLAN
DRAFT

Designation part of the project:
P-114/2016-01

Date:
March 2017.

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ABBREVIATIONS AND ACRONYMS

AADT	Annual Average Daily Traffic
CEP	Contractor's Environmental Plan
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMP	Environmental Management Plan
INP	Institute for Nature Protection of the Republic of Serbia
IPCM	Institute for Protection of Cultural Monuments of th Republic of Serbia
MoAEP	Ministry of Agriculture and Environmental Protection
MoT	Ministry of Transport (fmr. Ministry of Infrastructure ar Energy – MoIE)
PERS	Public Enterprise "Roads of Serbia"
PSC	Project Supervision Consultant
RE	Resident Engineer
RRSP	Road Rehabilitation and Safety Project
SE	Site Engineer
SLMP	Safety Labour Management Plan
WB	The World Bank Group
WMP	Waste Management Plan

INTRODUCTION

The Environmental Management Plan (EMP) has been prepared for the proposed heavy maintenance and rehabilitation (road rehabilitation-upgrading) of the State Road of the IB Category, No. 29, section Aljinovici – Sjenica to ensure application of the good environmental practice and document compliance with the requirements of the contract.

In accordance with protection guidelines issued by the International Financial Institutions, the project is classified as Environmental Category B, and requires the development of EMP (hereinafter referred to as EMP).

The Project Proponent is the Government of Serbia, acting through its Ministry of Agriculture and Environmental Protection (MoAEP). Project implementing entity is Public Enterprise “Roads of Serbia” (PERS).

The aim of the environmental management plan is to highlight the negative environmental impacts and management problems during the construction period, as well as the necessary mitigation measures that the Contractor must apply. The key components of the Environmental Management Plan are: Plan for the mitigation of adverse impacts on the environment and Plan for monitoring the impact on the environment.

EMP analyses the phase of rehabilitation and exploitation of the section, defines measures and Contractor's obligation during rehabilitation phase that have to be implemented in order to protect environment.

Development of the project will be in line with the Serbian legislation, ordinances and regulations, as well as with international conventions and protection guidelines, issued by International Financial Institutions.

According to the project implementation plan, the main objectives of the project are to increase the use value and durability of the road, improve traffic safety, consider requirements of the local community (social aspect) and comply with the environmental requirements to the maximum extent possible in the circumstances of physical constraints and limitations arising from the nature of the permitted construction and traffic interventions.

For the proposed section, Environmental Management Plan focuses on maintenance and damage removal. It is a part of the relevant contract for the construction work. Activities related to the regular maintenance of sections, although they are not in the focus of this plan, will be included in summary form in order to complete the plan.

Preparation for the development of an Environmental Management Plan was prepared through theoretical studies and research in the field, including consultations with representatives at the regional level and local authorities. Environmental Management Plan is based primarily on field research conducted during August and September 2016.

EXECUTIVE SUMMARY

Project description

Project of urgent maintenance and rehabilitation of state road IB Category No.29 section Aljinovici – Sjenica is part of the support project of the International Financial Institutions (World Bank, European Investment Bank and European Bank for Reconstruction and Development) to RS government for the implementation of Road Rehabilitation and Safety Project (RRSP). This project represents the first phase of the Government's National Road Rehabilitation Program over a period from 2014-2019 and covers,

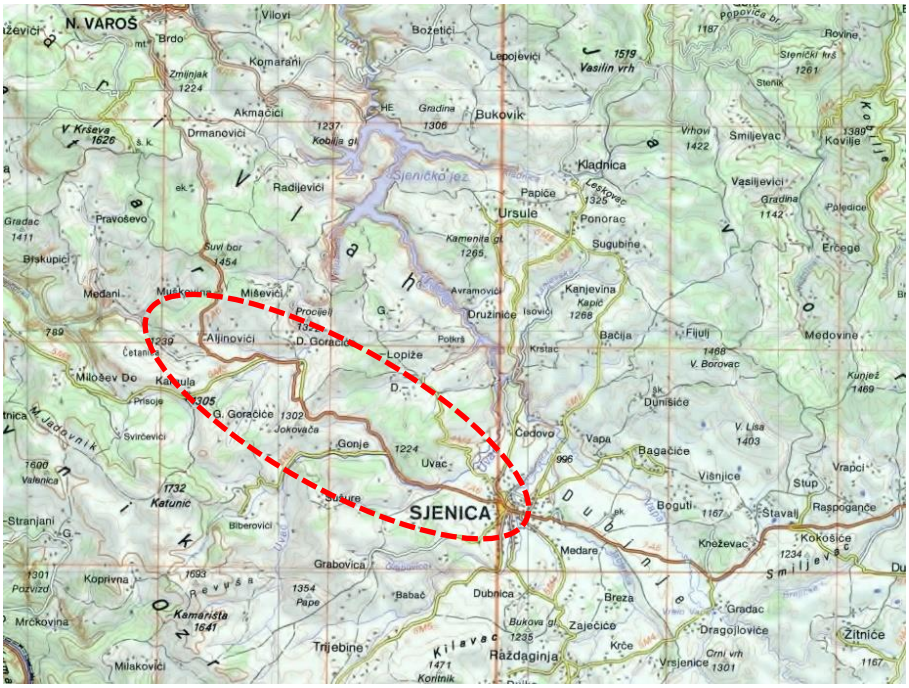
- Improvement of the national road network through rehabilitation of about 1,100 km of existing road network spread over the entire country
- Increasing the safety level on the roads by applying safety measures in all project phases
- Capacity building and coordination of traffic safety institutions through implementation a number of different services

The institution responsible for the implementation of the Plan is Public Enterprise "Roads of Serbia" (hereinafter referred to as PERS). Within PERS is established the Project Implementation Team-PIT who need to carry out all necessary activities and actions for successful management and completion of the project with the help of professional services companies and in cooperation with other interested institutions of the Government of the Republic of Serbia.

Proposed section belonging to Zlatibor District, situated in the southwest part of the Republic of Serbia. Section Aljinovici - Sjenica (Picture 1) with a length of 13.83 km, is a part of the State Road of the IB Category no. 29 (old road code M-8) is part of transport links between the state border with Montenegro (border crossing Jabuka), through the municipalities of Prijepolje, Nova Varos, Sjenica to the city of Novi Pazar and is part of a project designed for increased maintenance within the first year of its implementation.

Total length of the State Road of the IB Category, No. 29, section Aljinovici – Sjenica is 13.83 km. Start of the route is at the exit of Aljinovici settlement, chainage km 39+100.00, and finish of the section are at the beginning of the settlement Sjenica chainage km 52+931.00. Of the total length of 13.83 km, section on an approximate chainage from km 44+843.00 to km 47+281.00 (L = 2,438 m) was rehabilitated in 2009 from the National Investment Plan, and in the framework of this project is covered only in respect of request to appropriate traffic signs and traffic equipment, as required by the project task.

The road works covered by the Project will be carried out on the existing road with no change of the alignments of the existing road. The project entails **no resettlement and land acquisition as defined by OP 4.12**, nor long lasting disruptions to the natural environment and human settlements and activities.



Picture 1:Location of Aljinovici – Sjenica section

Policy, legal and administrative framework

The Ministry of Agriculture and Environmental Protection (MoAEP), is the key institution in the Republic of Serbia responsible for formulation and implementation of environmental policy matters.

In the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment ("Official Gazette of RS", 135/2004, 36/2009), which is completely in line with European EIA Directive - 85/337/EEC. The Environmental Impact Assessment is not required for road rehabilitation and maintenance, except in cases when the section is located near or passes through protected natural or cultural area.

Based on the decision issued by the Institute for Nature Conservation of Serbia, (Appendix VI) state road IB category No. 29, Aljinovici – Sjenica is not located within a protected area for which is implemented or initiated the process of protection, but with one of its part is in coverage area of ecological network, ecologically important area - the River Uvac and River Milesevka (Goracanka).

According to the World Bank policy the subject area is considered that going through protected area.

In the process of defining project requirements Office for Environmental Protection issued the decision from which, among other things, can allocate requirements for the project to predict sedimentation tanks and separators of fats and oils for rinsing water resulting from the roadway especially on the section of the road along the River Uvac.

According to the preconditions issued by the Institute for Protection of Cultural Monuments Kraljevo, two locations (Zone 1 – village Uvac, archaeological sites

„Crkvina“ and „Uvcansko cemetery“ and Zone 2 – village Uvac archaeological sites „Gradac“, are recognised as cultural goods and presence of an archaeologist during the earthworks is mandatory. The investor is obliged to inform the Institute 15 days before the commencement of works in order to organize Archaeologist which monitors the work and can prescribe additional requirements in accordance with the situation on the site.

Request for opinion regarding necessity of EIA procedure for this project was submitted to the Ministry for Agriculture and Environmental Protection. According to received response ref. No. 011-00-01297/2016-16 dated 30.09.2016. EIA is not required. (Appendix VI).

Lender requirements will also apply to this project and include the following Environmental Policies

- Operational Policy OP 4.01 Environmental Assessment;
- EBRD Environmental and Social Policy 2008
- EIB Statement of Environmental and Social Principles and Standards (2008).

The World Bank, European Bank for Reconstruction and Development (EBRD) and European Investment Bank (EIB) will require that the project complies with the Republic of Serbia national laws and EU standards.

Baseline conditions assessed during route survey

Functionally, according to the Regulations on the conditions that the safety aspect must meet the road structures and other public road elements ("Official Gazette of RS", no. 50/2011) this section can be classified into the remote inter-regional road (connecting inter-regional road).

Picture 2:Beginning and the end of the section

Section of the state road IB category No. 29, Aljinovici – Sjenica has a total length of 13.83 km.

The complete route is treated as rural with all the associated characteristics.

According to survey record, along the section there are 44 culverts (20 tubular, 15 arched, 2 plate and 7 inaccessible), and a number of retaining walls (of different types and with different dimensions) as well as 2 bridges.

The route crosses the following watercourses:

- River Milesevka - km 39+147.00,
- River Uvac – km 50+870.00

On the observed section dispersing system of drainage is implemented. The atmospheric water from the road surface partly goes freely over the shoulder and embankment into the field. Remaining part of atmospheric water goes into the gutters or in the peripheral channels, and without treatment ends up in the recipient.

As far as cultural monuments and protected goods, according to the preconditions of the Institute for Cultural Heritage Preservation Kraljevo, two locations are recognised as cultural goods and recognised as zones of the existence of archaeological goods: Zone 1 – village Uvac archaeological sites „Crkvina“ and „Uvcansko cemetery“ and Zone 2 – village Uvac archaeological site „Gradac“, which require the presence of an archaeologist during the earthworks. During the design, designer is obligated to implement all the additional requirements in accordance with the preconditions of the Institute for Cultural Heritage Preservation Kraljevo.

Along observed sections were identified following industrial facilities and contents:

- Illegal dump site (on the right side of the road at approximate chainage km 44+300.00 pictures 3 и 4)
- Quarry zone „ Wild River “ (the place of exploitation on the left side of the road at approximate chainage km 47+500.00 Pictures 5 and 6,
- Facilities for processing stone on both sides of the road at approximate chainage km 50+700.00 pictures 7 and 8)
- Electric Power Industry Complex on the right side of the road at km 51+700.00 picture 9

Picture 3:Landfill

Picture 4:Landfill on the right side of the road Aljinovici – Sjenica - location

Picture 5: Quarry zone „ Wild River “ the place of exploitation

Picture 6:Quarry zone „ Wild River “ the place of exploitation - location

Picture 7:Quarry zone „ Wild River “ facilities for processing stone

Picture 8:Quarry zone „ Wild River “ facilities for processing stone - location

Picture 9:Electric Power Industry Complex on the right side of the road

Current traffic load (AADT) on this section is cca 700 vehicles/day.

The dominant source of noise in the observed area is the existing quarry "Wild River" and facilities for processing stone, identified as point sources of noise, and the existing road as a linear source. As the road passes through mostly uninhabited area noise does not significantly affect the quality of life. An existing sources of air pollution have been identified. These are the existing road as a linear sources of pollution and the "Wild River" facilities for processing stone, and "wild" landfill as point sources of air pollution.

Particular attention should be paid to areas where is identified a number of business activities in the road section in the zone of Sjenica and quarry zones "Wild River". In these sections it's important to improve road safety.

Summary of environmental impacts

Road rehabilitation works on proposed section will have only minor impacts on the environment (environment category B). Most impacts are temporary and they will disappear after the road rehabilitation works get completed.

The possible temporary impacts as consequence of the construction activities will consist of, among others, disruption of current traffic circulation, roadway safety, damage to access roads, dust nuisance, gaseous emissions, potential pollution of soils and water resources, brief disturbance to biota, and momentary interference to neighbouring settlements through various operation activities.

Activities outside the construction site, include work in the quarry, borrow pits and asphalt base, which if not managed properly, can cause local adverse impacts.

During the execution of works on the heavy maintenance local population won't be exposed to a significant influence of air pollution and increased levels of noise, since the first houses and commercial buildings in the suburb of Sjenica are located at a distance of 15 to 200 m from the road

The Contractor's yard and workers camp can be potential sources of temporary adverse impacts.

According to the Clients demands there will be no no resettlement and land acquisition as defined by OP 4.12.

Local residents will be affected with minor air and noise pollution during rehabilitation works on proposed road section.

In respect to future use of the rehabilitated road section – this section belongs to the interregional roads network, on which significant increase of road traffic as a result of rehabilitation works is not expected.

In respect to impact of the potential increase of the vehicle speed on rehabilitated roads, this issue will be addressed through the project's road safety component, which will include implementation of the active and passive measures to control the vehicle speed on rehabilitated road sections.

Various cases of water contamination can occur during the rehabilitation of the road and future operation. Wastewater discharged during construction could endanger the quality of ground and surface water and River Milesevka and River Uvac. Adequate mitigation measures (waste water collection from the road surface and bridges, installation of oil separators before discharging waste water into recipient) and monitoring activities are planned, in accordance with the Law on water ("Official Gazette of RS", 30/10, 93/12). As for the potential pollution during operation, these are limited to accidents only. In such a case, procedures for action in incidental situations, as defined by the Ministry of Interior and in the Law on Water, will apply.

The works execution on the heavy maintenance of the Aljinovici – Sjenica could have moderate to minor cumulative impacts with a temporary character (noise, air pollution, water and soil pollution), and which will not significantly affect the environment.

The proper implementation of the EMP measures, as listed in Appendix I would offset or minimize any impact on local human and biotic environment that might be related with any long-term cumulative negative effects.

Environmental management plan

Possible environmental impacts will be mitigated during the design/pre-rehabilitation, rehabilitation, and operation Phases, are summarized and shown in Appendix I.

The rehabilitation impacts will be minor, reversible and manageable if the mitigation measures, as given in the EMP, are properly implemented.

EMP has 2 main parts:

- Mitigation Plan (Appendix I),
- Monitoring Plan (Appendix II)

with Institutional arrangements and reporting procedures.

During the rehabilitation, the Contractor will work according to the Contractor‘s Environmental Plan (CEP) which is based on the EMP.

The findings and proposed mitigation measures have been compiled into an Environmental Mitigation Plan (Appendix I). It summarizes all the anticipated environmental impacts and its associated mitigation measures during the design, rehabilitation and operational phases. It makes reference to the laws and contract documents, approximate location, timeframe, and the responsibility for its implementation and supervision.

A monitoring plan for the proposed Project (Appendix II) has been prepared too. The main components of the monitoring plan are the following:

1. Environmental issues to be monitored and the means of verification,
2. Specific areas, locations and parameters to be monitored;
3. Applicable standards and criteria;
4. Duration and frequency and
5. Institutional responsibilities for monitoring and supervision.

Public consultation

As required by the WB Safeguards Policies, public consultations will be organized during the preparation of EMP and before the works start. The EMP and other project information will be presented to the Public and be available to the locally communities. All documents will be delivered to the Municipalities, publicly available on web site, placed at PERS web site and announced in the newspapers.

The public will be informed through local media about the time and place of the public consultation.

Beneficiary consultations will be conducted during the construction phase too, and records of environmental and social issues raised and complaints received during consultations, field visits, informal discussions, formal letters, etc. will be followed up and the records will be kept by the Contractor.

An appeals mechanism will be implemented to ensure that all complaints from local communities are dealt with appropriately, with corrective actions being implemented and the complainant being informed of the outcome. It will be applied to all complaints from affected parties. An appeal form is attached in Appendix IV and hard copies will be made available at community centres.

PROJECT DESCRIPTION

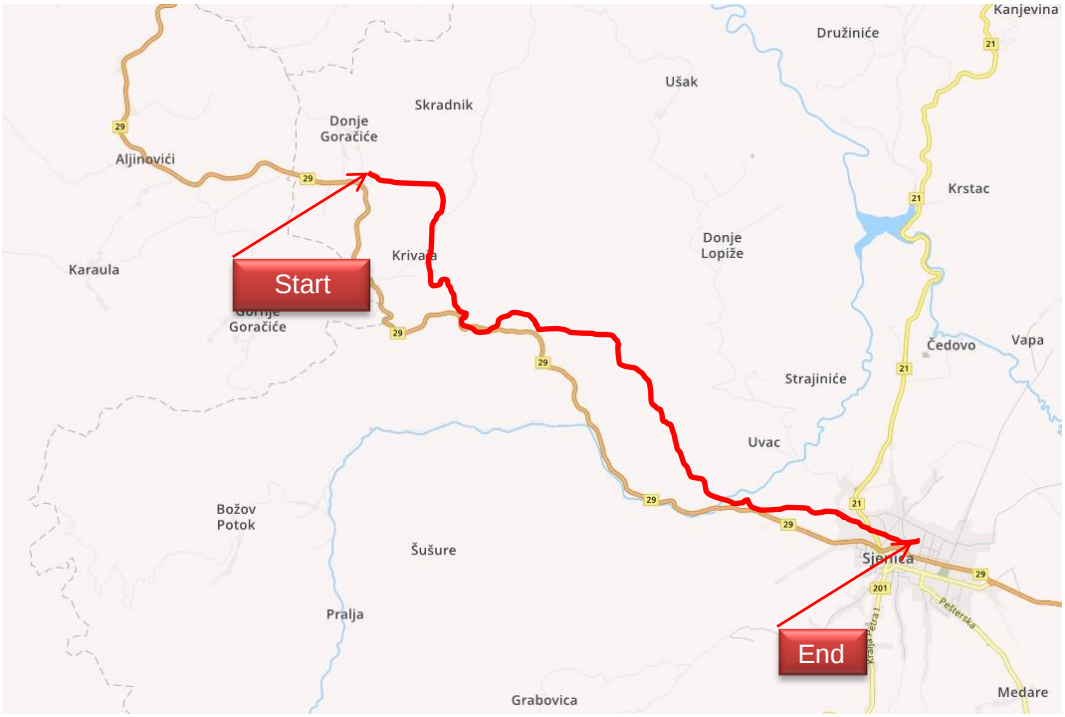
Location description

Observed section belonging to Zlatibor District, situated in the southwest part of the Republic of Serbia. Section Aljinovici - Sjenica with a length of 13.83 km, is a part of the State Road of the IB Category no. 29 (old road code M-8) is part of transport links between the state border with Montenegro (border crossing Jabuka), through the municipalities of Prijepolje, Nova Varos, Sjenica to the city of Novi Pazar and is part of a project designed for increased maintenance within the first year of its implementation.

The beginning of the section is 2.620 km from the cross section 2902 in the direction of growth chainage (approximate chainage km 39+100.00), and the end of the section is about 730м from the cross section 2134 in the opposite direction of growth chainage, to the entrance to the Sjenica and the beginning of the sidewalk (approximate chainage 52+931.00) picture10.

Of the total length of 13.83 km, section on an approximate chainage from km 44+843.00 to km 47+281.00 (L = 2,438 m) was rehabilitated in 2009 from the National Investment Plan, and in the framework of this project is covered only in respect of request to appropriate traffic signs and traffic equipment, as required by the project task.

The complete route is treated as rural with all the associated characteristics.



Picture 10: Location of subject road section from Aljinovici to Sjenica

Sjenica is located in the west of Raska area or Sandzak. Located on the road Novi Pazar - Sjenica - Nova Varos, which connects the Ibar Highway with Zlatibor road so it has good transport links with the east and west of Sandzak. Sjenica municipality belongs to the largest part of Sjenica-Pester plateau. The average altitude of the Pester plateau is between 1,100 and 1,200 meters.

All this outstanding natural environment has all features of karst surface with prevailing limestone walls and with real examples of karst topography. Celebrities are Tubica, Ice, Bazdarska cave and canyon of the River Uvac, which is close to the section Aljinovici - Sjenica.

On Pester plateau are present the specific characteristics of a hydro-meteorological characteristics and therefore appear extremely low temperatures in summer and winter.

Type of construction which is planned on the route include: work on strengthening of the existing pavement, rehabilitation of the existing system of drainage pavement and roadbed, solution to collection and drainage of rain and leachate to the surrounding terrain and the design of all road elements that enhance system safety.

The width of the existing asphalt pavement with edge bands is in the range of 5.5 to 6.7 m in sections relevant to this contract.

On the route there are two bridges:

1. Bridge over River Milesevka (picture 11),
2. Bridge over River Uvac


Picture 11: Bridge over River Milesevka

All bridges are longitudinally and transversely one side inclined and there is no controlled drainage. Water is flowing longitudinally and spill over road alignment.

The new bridge at about the chainage km 50+898,00 (km 11+798,00 BPM) over the River Uvac is not the subject of this project. The designer is obliged to consider the design of the new bridge over the River Uvac, which is being developed by the Institute for roads. At the time of the visit the new bridge was being built.

On the proposed section is applied dispersing system of drainage. All the water from the road running down the shoulder and embankment on the surface or in the peripheral channels.

In addition, this part of the section there are several culverts and channels that are in poor condition and they have not been cleaned.

Currently, the traffic load on this stretch of road is about 700 vehicles per day (total in both directions). The data were obtained from the website of the PERS-a (automatic counter traffic markings "1055 ABS" for 2015)[1]

According to the decision on establishing the list of first class water ("Official Gazette of RS", no. 83/2010) River Uvac and River Milesevka belong to natural watercourses and are classified as first class waters. River Uvac is also classified as a interstate river, while Milesevka belongs to the "other" natural watercourses.

Both rivers belong to a second class of water in respect to water quality,and are suitable for bathing, recreation and water sports, for the cultivation of less valued fish species (Cyprinid), and with the normal methods of treatment (coagulation, filtration, and disinfection) can be used for drinking and food industry ("The Regulation on water classification", " Official Gazette of RS", no. 5/68)

[1]http://www.putevi-srbije.rs/images/pdf/brojanje/2015/tabela_saobracajnog_opterecenja_na_dp_IBreda_preliminarni_rezultati.pdf

Picture 12: Typical segments along the section

As far as possible pollution during road rehabilitation works on proposed section, it is limited to possible accidents. In this case the procedure will be applied in the event of an incident which is defined by the Ministry of Internal Affairs and the Water Act.

Rehabilitation works description

According to the design, widening of the road is planned to solve the problems of frequent intersections and connections, accessing the state road from the settled areas and problem of pedestrian's movement and traffic safety.

The road works covered by the Project will be carried on the existing road with no change of the alignments. The improvement of the road geometry shall be done, if necessary, with the goal of traffic safety.

Types of works, which are planned on the route generally consist of the works to reinforce the existing pavement, with the widening to the total width of 7.2 m in rural areas and to 6.5 m in residential areas with corresponding elements on transversal profile within existing road alignment, reconstruction and remediation of existing drainage system, construction of elements in order to prolong durability of construction and improve traffic safety.

New intersections in level will be designed too. Except new solutions for intersections, bus stops in the settlements will be designed, according to requirements of the locals and conditions on site.

Connections with local roads will be constructed. Removal of mud from vehicles facilities, opening intersections to get better visibility and improvement of intersection geometry with local roads will be done. Where possible lines for turn left on the main road will be added and lines for turn right will be added.

Due to widening of the road, extension of existing (that are not damaged) or construction of new culverts is designed.

Reconstruction and extension of existing drainage systems (construction of diches and open channels) will be done in line with Main Design. Most convenient recipients will be defined too.

Drainage of the road in the area of the bridge across the River Milesevka, at the beginning of the section, and over River Uvac before the end of the section, as well as the existing channels and in the zone Uvac will be done by placing shallow concrete channels in the bottom of embankment. Water from the pavement and bridges will be collected by channels and lead to waste water treatment systems that will be placed close to recipient, and all in accordance with the terms of the MoAEP.

In order to respect the conditions of the project and reduce the negative impact of the road on the environment all the posible measures are taken and implemented in the project, according to economic possiblities and demands of the project task. It is provided a solution for the purification of waste water in the area of the bridge across the River Goracanka Adistanka, as well as on the road sections along the River Uvac.

Bridge zone over the River Uvac is not the subject of the project and designer solution is incorporated into the system of drainage water from the roadway as defined with other project documents.

In line with Terms of Reference (ToR) and according to situation on the site, reconstruction and rehabilitation works on reconstruction of bridges are designed. This includes, pavement rehabilitation on the bridge, rehabilitation of sidewalks, replacement of curbs, and replacement of fences and guardrails. Road with and sidewalks along the bridges (profile of the bridge) will not change.

There are no envisaged works from the river bed for reconstruction of the bridge across the River Milesevka.

Hydraulic characteristics of the elements for drainage along the road are checked and corrected with the goal to get efficient and controlled system for collection of rainwater.

POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

Relevant institutions

Ministry in charge of environmental protection (The Ministry of Agriculture, and Environmental Protection-MoAEP) is the key institution in Republic of Serbia responsible for formulation and implementation of environmental policy matters.

The other aspects of environmental management related to road rehabilitation projects are dealt with several other institutions, among which are the Institute for Nature Protection of Serbia (INP) and the Institute for Protection of Cultural Monuments of the Republic of Serbia (IPCM), and the Public Enterprise “Roads of Serbia” (PERS).

The following opinions has been obtained for the purposes of this project:

- Institute for protection of monuments of culture Kraljevo no. 953/3 of 12.08.2016.
- Institute for protection of nature of Serbia No. 020-1264/3 of 07.07.2016.
- Opinion of the Ministry of agriculture and environmental protection no. 011-00-01297/2016-16 of 30.09.2016. • JVP Srbijavode-VPC Sava-Danube no.1-3759/1 of 26.09.2016.

Existing Serbian legislation

Environmental protection in Republic of Serbia is regulated by several national and municipal laws and by-laws. The environmental legislation in force in Serbia is summarized in Appendix III.

EIA procedure in the Republic of Serbia

In the juridical system of the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment (“Official Gazette of RS”, 135/2004, 36/2009), which is completely in line with European EIA Directive - 85/337/EEC. Therefore, Environmental Impact Assessment is not required for road rehabilitation projects unless their alignment is placed within or in the vicinity of natural/cultural protected areas. In that case Project proponent is obliged to submit Request for Decision-making on the necessity of preparation of the Environmental Impact Assessment to the MoAEP. Depending on assessment of significance of potential environmental impacts of project it could be decided that it is necessary to implement full EIA procedure for that kind of projects.

Based on the above criteria, EIA in not required for this project.

Relevant International Financing Institutions policies and statements

As the road rehabilitation is funded by WB, EIB and EBRD the following Lender requirements will need to be applied to any works:

- WB: Operational Policy OP 4.01 Environmental Assessment, which require partial EIA and development of site specific EMPs for projects belonging to Category B.;
- EBRD: Environmental and Social Policy 2008
- EIB: Statement of Environmental and Social Principles and Standards (2008).

Government of Serbia (GoS) regulations do not require separate section-specific EMP to be undertaken for this type of investments (road rehabilitation), while the WB policy requires partial EIA assessment and preparation of site-specific EMP for each section.

BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

Section of the state road IB category No. 29, Aljinovici – Sjenica has a total length of 13.83 km (old road code M-8). Based on the decision issued by the Institute for Nature Conservation of Serbia, (Appendix VI), this section of the road is not located within a protected area for which is implemented or initiated the process of protection, but the subject area are close to the ecologically significant area - the River Uvac and River Milesevka (Goracanka).

Picture 13: Typical segments along the section

Natural resources and cultural heritage

Under the terms issued by the Institute for Protection of Cultural Monuments Kraljevo (Appendix VI) on a part of the State Road of the IB Category no. 29 section Aljinovici – Sjenica (old road code M-8), two locations are recognised as cultural goods and recognised as zones of the existence of archaeological goods: Zone 1 – village Uvac archaeological sites „Crkvina“ and „Uvcansko cemetery“ and Zone 2 – village Uvac archaeological site „Gradac“.

It should be noted that on the route and in the vicinity of the route, on the left and the right side, on the part of the road defined by coordinates (Table 1) there is a site „Crkvina“ and „Uvcansko cemetery“. It is a site with a necropolis with unknown chronology, as archaeological investigations have not been carried out.

On the right side of the road Sjenica - Nova Varos is located the hill Gradac in the village of Uvac, where is possible an existence of the fortified settlement from the period of late antique and the Middle Ages on the part of the road defined by coordinates (Table 1).

List of zones in which it is necessary to monitor work:

	Location	Coordinates of zone for monitoring			
		From point		To point	
Zone 1	Crkvina i Uvcansko cemetery	X:7417190.843	Y:4793412.697	X:74168620.229	Y:4793479.37
Zone 2	Gradac	X:7414265.074	Y:4795073.227	X:7414265.074	Y:4795417.71

Picture 14: Crkvina i Uvcansko cemetery

Settlements

The respective section of the road does not pass through populated areas. Start section is coming out of Aljinovica the chainage km 13+100.00, and the end of the section is at the entrance to Sjenica at chainage km 52+931.00.

The section passes through the municipalities of Aljinovici, Donje Goracice, Masovici, Susure, Uvac and Sjenica.

Watercourses

The section is intersected by following river flows:

- River Milesevka – km 39+147.00,
- River Uvac - km 50+870.00

According to the decision on establishing the list of first class water ("Official Gazette of RS", no. 83/2010) River Uvac and River Milesevka belong to natural watercourses and

belong to first order waters. River Uvac is a interstate river, while Milesevka belongs to the "other" natural watercourses.

Both rivers belongs to a second class of water,and are suitable for bathing, recreation and water sports, for the cultivation of less valued fish species (Cyprinid), and with the normal methods of treatment (coagulation, filtration, and disinfection) can be used for drinking and food industry ("The Regulation on water classification", " Official Gazette of RS", no. 5/68)

River Milesevka (Goracanka) has no parallel flow with the section but with it intersects at the beginning of the course.

River Uvac parallel flow with the section starts at km 48+000.00 and parallel to the section runs to km 50+861.00 where it intersects with the road. An interesting part of the flow along the section (from km 49+700.00 to km 50+000.00 km) is the resort / beach on the River Uvac to be taken into consideration in the project concerning road safety.

Picture 15: The resort / beach on the river Uvac

In accordance with ToR and on the basis of site visits, a design documentation for the rehabilitation of the bridge over River Milesevka is prepared.

The new bridge at chainage km 50+898.00 (11+798.00 BPM) across the River Uvac is not the subject of this project. The designer is obliged to take into consideration the design of the new bridge over the River Uvac, which is being developed by the Institute for roads.

Table 1: *Data from a database of bridges (BPM)*

Name of the structure:	BRIDGE ACROSS THE RIVER MILESEVKA	BRIDGE ACROSS THE RIVER UVAC
ID object:	01287	01288

Name of the structure:	BRIDGE ACROSS THE RIVER MILESEVKA	BRIDGE ACROSS THE RIVER UVAC
Road code:	IB-29 (M-8)	IB-29 (M-8)
ID section:	0136	0136
Chainage:	km 0+042 (39+142)[2]	km 11+798 (58+898) [3]
Type and the name of the obstacles:	River Milesevka	River Uvac
Static system:	simple beam	simple beam
Span of the bridges:	12.50	20.8 m
The total length of the structure:	18.30	28 m
Road width	7.00	6.60 m
The width of the left pedestrian paths:	1.00	0 m
The width of the right pedestrian paths:	1.00	0 m
Bridge skew:	without chamfer	without chamfer
Lateral pavement fall	unidirectional	unidirectional
Installation:	-	-
Bridge condition:	Left (lower) edge of footpaths seriously damaged, exposed reinforcement, due to the improper drainage solutions bridge (there are no curbs) No dilation-cracks in asphalt at abutments There is a water leakage in the coupling between the two mounting plates	The bridge is seriously damaged, closed for traffic There is road deviation with culverts to be used for traffic.

Air pollution

On the basis of site visits existing sources of air pollution have been identified. These are the quarry "Wild River", its facilities for stone processing and landfill which are point sources, as well as the existing road as a linear sources of air pollution.

Landfill is on the right side of the road at approximate chainage km 44+300,00. (pictures 3 and 4)

It is noted that the landfill is not fenced and the wind blows garbage which increases the risk of pollution of the River Uvac and the environment in general, which is considered

[2] According to the new reference system from 2015

as environmentally important area. It was also noted that the solution for the junk accumulation problem is by burning garbage which adversely affect the environment in terms of air pollution.

Data about landfill were not available, and consequently it can be concluded that it is a illegal landfill. Having an insight into the cadastre has been established that the landfill is located on two cadastral parcels 196/1 and 195 of the cadastre Masovic, the municipality of Sjenica. Both parcels are owned by Srbijasume.

Accordingly, in the context of this project will be submitted the measures that are within the road area, and also will draw attention and suggest local institutions to find a long lasting solution to the problem of waste disposal in accordance with the Waste Management Law and the Regulation on Waste Disposal.

The quarry "Wild River" objects have a significant impact on air pollution. Place of exploitation of stone is located on the left side of the road at approximate chainage km 47+500.00 (Pictures 5 and 6), while the facilities for stone processing and administrative buildings on both sides of the road at approximate chainage km 50+700.00 (Figures 7 and 8). It is noticeable accumulation of dust on vegetation and surrounding objects.

Based on experience and the expected traffic intensity (during and after the planned rehabilitation works) the mentioned road section is not expected to have significantly increased intensity of air pollution as a product of the exhaust gases.

Data on measurements of air pollution on the observed section were not available.

Noise

From noise sources in the concerned section can be extracted the quarry zone "Wild River" (place of exploitation on the left side of the road at approximate chainage km 47+500.00 Picture 6, and facilities for processing stone on both sides of the road at approximate chainage 50+700.00 km Picture 8). The existing state road IB category No. 29, Aljinovici – Sjenica and facilities of quarry "Wild River" are the only dominant noise sources. Data on measurements of noise on the observed section were not available.

SUMMARY OF ENVIRONMENTAL IMPACTS

The following table provides a summary of the Environmental Impacts that are predicted for the project

Impact	Significance	Comment
Impacts on land use/ settlements	low	There will be no land

Impact	Significance	Comment
		acquisition as defined by OP 4.12 during the project implementation.
Ground and surface water	low	Due to low amount of drainage water that can be drained the consequential impact is minimal to negligible
Air quality	low	Temporary impact
Flora and fauna (protected areas and species)	low	Temporary impact
Noise	low	Temporary impact
Access/crossing points of the main road and local roads	low	The rehabilitation and widening works won't affect existing crossing points. No specific issues
Soil management	low	With application of waste management measures
Waste	low	waste and wastewater management will be prepared and implemented
Cumulative impacts etc.	Moderate/ minor	Temporary, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations only during the works

Road rehabilitation works on Aljinovici – Sjenica section will have only minor impacts on the environment (environmental category B). Most of the impacts are of temporary character and they disappear after the road rehabilitation works are completed.

Among other impacts possible temporary impacts as consequence of the construction activities will also consist of disruption of regular traffic regime;

1. disruption of current traffic circulation;
2. roadway safety;
3. damage to access roads;

4. noise,
5. waste and dust nuisance;
6. and air emissions;
7. potential impacts of soils and water resources;
8. brief disturbance to biota,
9. and momentary interference to neighbouring settlements through various construction and operation activities.

The Contractor's yard and workers' camp can be potential sources of temporary adverse impacts, too.

Air and noise pollution within the residential areas

It is expected that local residents who are living along will be affected with minor air and noise pollution during rehabilitation works on proposed road section. Local Air quality may experience some low and temporary deterioration due to dust from construction traffic and elevated levels of nitrogen oxide (NOx) and sulphur oxide (SOx) from construction equipment exhaust are the primary pollutants. The dust may settle on vegetation, crops, structures and buildings, and may cause some degree of impact.

Noise caused by the rehabilitation works will be only a temporary impact. Relatively small traffic load on proposed road and non-presence of significant amount of residential buildings placed close to the road lead to the conclusion that noise barriers will not be implemented within this project. Noise barriers should be constructed only if they are determined to be "reasonable" and "feasible" which is not the case in proposed road rehabilitation project.

Closing connections to the existing road and landscaping of road area in the area of illegal landfill, which is not fenced, will contribute to the reduction of noise levels, and the reduction of harmful impacts on air, land, water pollution and human health.

Section Aljinovici – Sjenica belongs to the state road network. On this section increase in road traffic due to road rehabilitation is not expected. Speed limits of vehicles on the reconstructed section is defined in the design part according to road geometry and within the road safety aspect. It define use of active and passive measures for control of vehicle speed.

Possible temporary negative impacts as a result of construction activities consist of:

- disturbance of traffic,
- road safety,
- damage to access roads,
- noise,
- interference due to raising of dust, waste and air pollution,
- potential impacts on land and water resources,
- a brief disturbance of biocenosis and the surrounding villages.
-

Activities involving work in a quarry, borrow pits and asphalt base, which if not managed properly, can cause local adverse impacts. Temporary offices and ancillary buildings can be potential sources of short-term negative impact.

Environmental Management Plan focuses more on the stage of works on the heavy maintenance, because it will become part of the relevant agreement for implementation and as such future obligations of the Contractor. Activities related to the regular maintenance of the section will be in focus of the Environmental Management Plan, but only be presented for the purpose of gaining a complete picture.

Potential Water Contamination

Cases of water contamination may occur during the rehabilitation of the project road from site run off, spills and water from the equipment maintenance areas and sanitary wastewater effluent from the work camps.

As for the potential pollution during operation, these are limited to accidents only. In such a case, procedures for action in incidental situations, as defined by the Ministry of Interior and in the Law on Water, will apply.

Fuel and lubricant spills can, in most instances, occur at the Contractor's work camp and motor pool while maintaining and washing equipment and work vehicles. The oily wash-water should be passed through an adequately sized, gravity oil separator prior to discharge.

Should spills occur in any part of the road, to mitigate the problem the Contractor should use absorbing materials, such as absorbent mats/fabrics, or sand and scrape off the contaminated soils and dispose them in approved facility, in accordance with the Law on water ("Official Gazette of RS", 30/10, 93/12).

Works on the bridge over River Milesevka will be done with a special care to avoid water pollution. Prior to start of any activity, MS for proposed works have to be submitted for approval to the Supervisor. Each MS will have environmental protection section and propose measures to be undertaken in order to avoid incidents and accidents during construction works. Mitigation measure or monitoring activities related to possible river contamination are part of this EMP.

Potential Cumulative impacts

The works execution on the heavy maintenance of the Aljinovici - Sjenica along with the existing quarry and landfill could have moderate to minor cumulative impacts with a temporary character (noise, air pollution, water and soil pollution), and which will not significantly affect the environment.

Possible environmental impacts will be mitigated during the design/pre-rehabilitation, rehabilitation, and operation phases, as summarized in the Environmental Management Plan.

A basic assessment of the proposed road reconstruction and rehabilitation project concluded that the rehabilitation impacts will be minor, reversible and manageable if the mitigation measures as given in the EMP are properly implemented.

The EMP (Appendix I and Appendix II) is based on the type, extent and duration of the identified environmental impacts. PERS (the Implementing Agency) will guide the design and supervision engineers and Contractors on the implementation of the EMP.

A. MITIGATION PLAN

The findings and proposed mitigation measures have been compiled into an Environmental Mitigation Plan (Appendix I). It summarizes all the anticipated environmental impacts and its associated mitigation measures during the design, rehabilitation and operational phases. It makes reference to the preconditions obtained from the relevant institution (Institute for the Nature Protection of RS and Belgrade Institute for Monument Protection, Water directorate), law and contract documents, approximate location, timeframe, and the responsibility for its implementation and supervision.

Contractor Management

The recommendations and proposed mitigation measures, as shown in Appendix I are Contractors‘ obligations. Mitigation measures will be incorporated in the design and rehabilitation practices and as such their costs will be included in the rehabilitation cost.

The EMP is part of the work program and will be prepared by Contractor by qualified and experienced staff who will be responsible for the environmental compliance requirements of the EMP. The Contractor and its sub-contractors will fully comply with Republic of Serbia national laws, EU standards and Lender requirements.

The Contractor will use this document to cost his compliance with the EMP. It is the Contractor’s obligation to cost the implementation of environmental mitigation measures in his overall cost.

The Contractor will be required to provide a short statement that confirms that:

- the EMP conditions have been costed into the bid price,
- the Contractor has a qualified and experienced person on the Contractor‘s team who will be responsible for the environmental compliance requirements of the EMP.
- The Contractor and its sub-contractors will comply with Republic of Serbia national laws, EU standards and Lender requirements.

Design Phase

In the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment ("Official Gazette of RS", 135/2004, 36/2009). According to it, the Environmental Impact Assessment is not required for road rehabilitation projects if their alignment is not within natural/cultural protected areas.

Since there are no protected natural or cultural areas which could be endangered by the road rehabilitation works on this road section, EIA is not required.

Mitigation measures are part of the design and rehabilitation practices and the costs will be included in the rehabilitation cost.

In accordance with the terms of the Institute for Nature Conservation of Serbia project must be planned sedimentation pools and grease and oil separators from the roadway along the River Uvac (km 48+000,00 to km 50+870,00).

In accordance with a special request from the terms of reference to carry out a status check of landfill in the immediate environment of the road, the data of the identified landfill were not available, and consequently it can be concluded that it is a "wild" landfill. The proposed measures are to close the landfill, close connections to the existing road and landscaping of road area.

In addition to addressing the requirements of the Mitigation Plan the following additional activities will be prepared during the design phase in preparation for the mobilisation of the project:

Site Organization Plan

Construction Site Organization Plan will be prepared as part of the detailed design. Design will begin after the assessment of the situation on the ground. Study of organization includes environmental protection measures, measures of health and safety at work which are in accordance with legal requirements and the requirements of the Issuer (including measures defined in EMP and plan for safe and healthy work).

When it comes to possible contamination during operation, it is limited to the level of accidents. In such a case, the procedure will be applied to the Ministry of Internal Affairs for action in case of an accident and the Water Act.

The plan will contain the basic requirements for

1. Procurement of material required for the construction work,
2. Transportation of materials,
3. Setting up material,
4. Organization of the site,
5. Waste management,
6. Agreement bonded to a land (cleaning).

Technical specifications for works that include measures to protect the environment, safety and health at work:

1. Preliminary works
2. Repair works on existing pavement
3. Earthworks
4. drainage
5. The system of traffic signals

Site Sipervisor and PERS are responsible to meet EMP requirements in the stage of construction site organization.

The plan of construction site organization is the responsibility of the Contractor and the obligation to comply with it and act.

Requirements issued by the Department of Nature Conservation of Serbia relating to the organization of the site must be taken into account when drafting the Plan of site organization.

Site preparation and placement of objects, refers to all objects of artists such as: warehouses, workshops, concrete base, asphalt, etc. Locations and development facilities performance by the artist will be approved by a full-time engineer.

Taking into account the conditions of nature protection legislation and the requirements of environmental protection, during the site selection and organization of the site, as well as during the actual construction must comply with the following:

1. Temporary location for storing the necessary construction and other material and equipment is needed to be located outside the space with tall vegetation and rivers flooding zones, and limited only to the duration of the works execution;
2. Provide temporary or permanent locations (existing regulated utility facilities/landfills) for disposal of service rubble and other waste material in any state, and municipal waste generated during the construction. Restrict storage / disposal in river banks area of smaller watercourses of a temporary nature, as well as on agricultural land;
3. Provide after completion of the works that all areas which are in any way degraded by construction works should be as soon as possible remedied;
4. During the works execution, strictly observe the planned alignment and corridor around it, in order to the earthworks and the use of machines would not leave consequences on the environment;
5. When performing the construction works on the alignment of the road which is right next to the all rivers, it should be predicted the maximum preservation of the river banks and its vegetation, wild species and their habitats;
6. During the execution of works it is prohibited the dumping and disposal of any waste, a special construction in the river banks zone of any watercourse.
7. In the zone of transition of the road (bridge) over the watercourses, where the arrangement is necessary, the project/the design should foresee the usage of

stone and other natural materials and largely avoid concreting of river banks and riverbeds of the watercourses;

8. Restrict servicing vehicles and machinery along the way. In the event of accidental spillage of fuels, oils / lubricants and other pollutants must be repaired surface and a reset;
9. The respective construction works on the road alignment that passes through the populated places should be executed only during the daylight because of the potential impact of noise from construction equipment and vehicles;
10. Envisage the setting up of the protective fences and pedestrian crossings and passages at the places where it is most appropriate, especially on the locations near existing settlements;
11. During the construction along the whole alignment it should be maintained the maximum level of communal hygiene. Define locations for containers for temporary storage of waste;
12. The size of Contractor‘s facilities are limited to absolute minimum to reduce unnecessary clearing of vegetation;
13. The Contractor‘s facilities are to be contained within an adequate security fence.
14. The sites are properly drained. Paved areas, including vehicle parking areas, workshops and fuel storage areas are to drain to an oil and water separator;
15. Sanitary waste and grey waters are treated before release into surface water systems, in accordance with the Law on water (“Official Gazette of RS”, No. 30/10, 93/12).
16. Fuel storage areas are not located within 20m of a water course.
17. Where fuel in excess of 5,000 litres is stored on site, it will be stored in sealed tanks on a concrete base that is bunded to hold 110% of the tank capacity;
18. All workshops would be provided with oil and water separators;
19. The Contractor must have trained personnel who are competent in fuel handling procedures and for cleaning up accidental spills;
20. All waste oil, oil and fuel filters will be collected and disposed of in secure landfill areas. At the closure of the site, all contaminated soil will be excavated, removed and replaced with fresh topsoil;
21. Cleared material is to be piled into manageable sized heaps according to disposal or re-use requirements.
22. Limit the extent of excavation to reduce soil erosion potential. The Contractor will be responsible for ensuring that the erosion is contained by soil conservation protection methods.
23. Apply soil conservation protection methodology to susceptible areas to prevent / minimize storm water runoff carrying eroded materials off-site.
24. Avoid excavation and operating machinery in wet ground conditions.
25. Upon the completion of all works, it is necessary to remove the machinery, construction materials, containers, spare parts and others. equipment, as soon as possible;
26. After the completion of all works, it is required to cultivate the ground at all vulnerable areas by using the appropriate flora and species that are biologically stable under the given climatic conditions, resistant to adverse

impacts (exhaust gases) and compatible with the surrounding area and purpose;

PE “Roads of Serbia“ is obliged to check through the engaged consultant for monitoring/supervision whether the requirements of the environmental management plan and management safety organization plan are implemented at the site.

Rehabilitation Phase Mobilisation – Contractor EMP

During the rehabilitation, the Contractor will work according to the requirements of the Contractor‘s Environmental Plan (CEP) (based on the EMP) which will be prepared by the Contractor and approved by PERS. Supervision and monitoring of the CEP activities will be undertaken as follows:

I. The Contractor has the initial responsibility for preparing and implementing the CEP as per the works contract.
II. The Resident Engineer (RE) will direct the Contractor with regard to compliance with the CEP.
III. The PERS will carry out independent monitoring of the work and can issue Defect Notices to the RE who will transmit these to the Contractor.
IV. The Contractor will have his own representative on site – the Site Engineer (SE) who will be responsible for implementing the contract and complying with the CEP.

Contractor prepares CEP before commencing the work. The Contractor will prepare a Contractor‘s Environmental Plan (CEP) that addresses the conditions of the rehabilitation in the EMP and include measures to comply with national legalisation and Lender requirements. The CEP will detail how the Contractor will address the activities in the rehabilitation section of the EMP. The Contractor will submit the CEP to the PERS for approval.

Following the approval of the CEP, the Contractor together with the person on the Contractor‘s staff who will be responsible for supervising the CEP will meet the Project Supervision Consultant PSC (Environment) on-site. If the plan is appropriate and implementable, the PSC will advise the PE that the Contractor can now commence work.

Rehabilitation works

Preparation of site and establishment of Contractor‘s facilities: This applies to all of the Contractor‘s facilities, storage areas, workshops, labour camps (when needed), concrete batching areas, asphalt plant, etc.

The location and development of the Contractors‘ facilities will be approved by the PERS.

Locations will be selected so that:

1. Do not interfere with the environment and social well-being of the surrounding communities re noise, dust. vibration, etc.;

2. The size of Contractor‘s facilities are limited to absolute minimum to reduce unnecessary clearing of vegetation;
3. Sanitary waste and waste waters are treated before release into surface water systems, in accordance with the Law on water (“O.Gazette of RS”, 30/10, 93/12);
4. The sites are properly drained. Paved areas, including vehicle parking areas, workshops and fuel storage areas are to drain to an oil and water separator;
5. Fuel storage areas are not located within 20m of a water course. The Contractor‘s facilities are to be contained within an adequate security fence.
6. Clearing of sites and removal and disposal of vegetation:
7. Wherever possible limit area to be cleared and avoid excessive machine disturbance of the topsoil;
8. Cleared material is to be piled into manageable sized heaps according to disposal or re-use requirements;
9. Prevention of soil erosion on construction site: The Contractor will be responsible for ensuring that the erosion is contained by soil conservation protection methods.

The Contractor will:

1. Limit the extent of excavation to reduce soil erosion potential.
2. Apply soil conservation protection methodology to susceptible areas to prevent / minimize storm water runoff carrying eroded materials off-site.
3. Avoid excavation and operating machinery in wet ground conditions.
4. Where fuel in excess of 5,000 litres is stored on site, it will be stored in sealed tanks on a concrete base that is bunded to hold 110% of the tank capacity.
5. All workshops would be provided with oil and water separators.
6. The Contractor must have trained personnel who are competent in fuel handling procedures and for cleaning up accidental spills.
7. All waste oil, oil and fuel filters will be collected and disposed of in secure landfill areas. At the closure of the site, all contaminated soil will be excavated, removed and replaced with fresh topsoil.

Environmental Management during Rehabilitation works

Considering all identified impacts, it becomes essential for the Contractor to prepare and later conscientiously implement the EMP throughout the duration of the project to ensure compliance with legislative and Lender requirements.

The emphasis of the EMP shall be on the following:

1. Layout of the work camp and details of the proposed measures to address environmental impacts resulting from its installation. Description and layout of equipment maintenance areas and lubricant and fuel storage facilities including distance from water sources/bodies;
2. Sewage and septage management plan for provision of sanitary latrines and proper sewage collection and disposal system to prevent pollution of watercourses;

3. A plan (complaints mechanism and organizational structure) detailing the means by which local people and other project affected persons (PAP) can raise complaints arising from the rehabilitation process and how these will be addressed (e.g. through dialogues, consultations, etc.) (see Appendix IV for the Project complaint mechanism);
4. Soil Management Plan detailing measures to be undertaken to minimize effects of wind and water erosion on stockpiles, measures to minimize loss of fertility of topsoil, timeframes, haul routes and disposal site;
5. Dust management plan which shall include schedule for water spraying on access road and in nearby settlements along the project road, as well as list of equipment to be used; This applies to all of construction sites and haul roads. During rehabilitation, when dust may be generated, the Contractor will monitor the worksite conditions and apply dust control measures, which include reducing construction traffic movements and spraying water on exposed areas.
6. A plan indicating the location of the proposed material extraction site as well as rehabilitation measures to be implemented for the borrow areas and access roads upon project completion;
7. Waste and wastewater management plan. Disposal of waste materials: All construction waste materials including drums, lumber, sand and gravel, cement bags etc. are to be suitably disposed of. If these cannot be recovered for scrap value these materials should be taken to an approved landfill sites for safe disposal. Hazardous waste will be stored and removed from the construction site on demobilization, in accordance with the Law on Waste management (“Official Gazette of RS”, 36/09) The CEP should cover all aspects of waste management, including implementation of practice standards such as reduce, re-use and recycle. It should specify final disposal alignments for all waste and demonstrate compliance to national legislation and best practice procedures on waste management. The Waste Management Plan will, as a minimum, include details of temporary waste storage, waste transfer and pre-treatment prior to final disposal or recycling. Licensed/approved facilities for solid and liquid waste disposal must be used and a duty of care and chain of custody for all waste leaving the site will be followed. As part of the plan Contractors will be expected to produce waste handling forms for chain of custody, which will be used to control waste leaving site. Thus the waste controller will keep a copy of the form and the driver will always carry a copy and will ensure that the load is signed for at the final disposal site. All records will be kept by the Contractor for audit purposes and to demonstrate that the project is complying with best practice and applicable legislation;
8. Oil and fuel storage management plan. The CEP should cover all procedures for storage, transportation and usage of oils and fuels, refuelling of plant and machinery and procedures for minimizing the risk of ground and water contamination. All oils and fuels will be required to be stored within secondary containment of 110 % capacity and all spillages shall be cleaned up immediately. Re-fuelling vehicles will carry Spill Kits to enable spillages to be cleaned up as soon as possible. All categories of spillage will be reported in accordance with the Plan to be developed by The Contractor. Toolbox Talks

would be expected to be delivered on an ongoing basis as „continued training" and following any significant incident;

9. In-river works management plan. The CPP should cover procedures and plans for safeguarding aquatic habitats and fish during in-river work and will complement the Construction Method Statements;
10. Camp management plan. The CEP should contain procedures for establishing and operating construction camps in order to safeguard nearby communities and environmental resources;
11. Emergency response plan. The CEP should contain procedures for emergency response in the event of accidents or major incidents, in order to safeguard people, property and environmental resources. Details of the spill response equipment to be provided on site are to be specified;
12. Noise – all equipment is licenced and approved in accordance with EU standards. This applies to all machinery, vehicles and construction sites where noise and vibration may affect susceptible receptors. The Contractor will be responsible for ensuring that noise and vibration does not affect the adjacent communities, in accordance with the Law on noise protection ("Official Gazette of RS", 36/09). While it is unlikely that noise and vibration will be an issue due to the large distances between the activities and the communities the Contractor will confine all work to daylight hours (07.00hrs - 19.00hrs) should the community find that any night time operations become a nuisance;
13. Rehabilitation Plan: Clearance and rehabilitation of construction sites and removal of Contractor's facilities: It is Contractor's responsibility to address site cleanup. This includes the removal of all waste materials, machinery and any contaminated soil. The Contractor will develop a plan for handover, sale or removal of all plant, vehicles and machinery to ensure that no unserviceable items are left on the construction site, in accordance with the Law on Waste management ("Official Gazette of RS", 36/09). All construction sites and work areas will be rehabilitated so that these can be returned as close as possible to their previous uses. This includes the stabilization and landscaping of all of the construction sites. No waste will be left on site after the work is completed, in accordance with the Law on environmental protection ("Official Gazette of RS", 135/04, 36/09, 72/09). Should the Contractor fail to remove the waste, the PERS is entitled to withhold payment and arrange the clean-up and deduct the cost of the clean-up and administrative charges from the final payment.

Safety

Safety and Hazard Assessment:

Before commencing work, the Contractor will be required to identify potential hazards. Provisions for emergency responses are to be included in the Contractor's site safety plan which is to include nomination of a person who will be immediately contacted should an accident occur. The site safety plan will be submitted to the PSC for approval one week prior to starting work.

1. The Contractor will be required to keep the site free of drugs and alcohol;
2. The Contractor‘s site safety plan will include provision for a safe work environment and provide safety measures and protective equipment to all workers including; hand, head, eye and ear protection and safety footwear;
3. The site safety plan will include provision for first aid facilities on-site and employ a trained first aid person, in accordance with the Law on Safety and Health at work (“Official Gazette of RS”, 101/05);
4. The Contractor will provide supplies of potable water, toilets and wash water to the workers;
5. Safety and Labour Management Plan (SLMP) prepared by the PERS has to ensure H&S provisions during rehabilitation works;
6. Contractor is obliged to perform all project activities by respecting SLMP recommendations and all Serbian laws and sub-laws which are covering H&S issues.

The PERS and Contractor together have responsibility for reporting and investigating incidents.

Community safety from increased vehicle movements: This applies to all vehicles and particularly to haul trucks that pass through settlements. The Contractor will ensure that all vehicles which pass through villages are operated safely without endangering these communities.

The Contractor is to ensure that:

1. All trucks and equipment is maintained in a safe operating condition;
2. All drivers and machinery operators are trained and act responsibly (to be stipulated in the Contractor‘s site safety plan);
3. All loads are secured and all loads with potential dust generating materials (e.g. excavated soil and sand) will be covered with tarpaulins;
4. The Contractor will immediately remove any drivers that ignore any of the community safety requirements;
5. Speed limits will be observed.

Prior to commencement of construction activities/site works, all of the above plans will be submitted by the Contractor to the Sector for Investment within the PERS for approval.

Following the completion of works a Site restoration will take place. It’s Contractor obligation to restore location of the project as it was at beginning of the project.

Operational Phase

People Safety: During operation, according to the assessment performed within the design phase, road safety features will include:

1. Measures to slow the traffic; e.g. decreasing of speed at selected places (e.g. settlements, schools, markets, etc.);
2. Dust suppression sealing;
3. Improvements in road signage and pavement markings, and

4. Attention to road accident black spots.

Road Maintenance:

- Routine maintenance (grading, grass cutting, drain clearing, and pothole patching and shoulder repairs, together with regular control and maintenance of drainage structures and retention) will be undertaken on regular basis;
- Seasonal maintenance such as flood repairs, emergency maintenance to reinstate roads after major failures, and the regular upkeep of safety features and road signs will be undertaken as necessary;
- Major maintenance that include resurfacing and repairs are typically scheduled over periods of several years.

B. MONITORING PLAN

A monitoring plan for the proposed Project (Appendix II) has been prepared. The main components of the monitoring plans include:

- Environmental issue to be monitored and the means of verification,
- Specific areas, locations and parameters to be monitored;
- Applicable standards and criteria;
- Monitoring of noise levels near residential areas;
- Monitoring of the procurement of materials (checks that valid permits are in place);
- Duration and frequency and estimated monitoring costs; and
- Institutional responsibilities for monitoring and supervision.

A field monitoring checklist has been prepared based on the EMP and monitoring plan (Appendix II). The field monitoring checklist will be used by the supervising field engineers. The signed checklists will be provided to the PERS who will be responsible for the follow-up and compliance reporting.

The PERS will maintain a Complaints Database, which will contain all the information on complaints or complaints received from the communities or other stakeholders. This would include: the type of complaint, location, time, actions to address these complaints, and final outcome.

C. INSTITUTIONAL IMPLEMENTATION AND REPORTING ARRANGEMENTS

Project Implementation

PERS is the Implementing Agency for the Project and will be responsible for the implementation and compliance with the EMP and Monitoring Plan. Day-to-day implementation and compliance will be the task of PSC.

Prior to the commencement of works PERS will submit to the Bank for its approval this section specific Environmental Management Plan.

The Contractor will provide “Zero monitoring” results prior to commencement of earth works, during its own mobilization phase.

To ensure that the proposed mitigation measures will be carried out by the Contractors during the construction stage, the Project Proponent undertook the following:

I. Clearly set out in the tender and contract documents the Contractor’s obligation to prepare CEP and undertake environmental mitigation measures as specified in the Environmental Mitigation Plan in Appendix I (appended to Contract specifications);

II. No compensation for the costs of the required environmental mitigation measures and monitoring activities in the form of the particular item in the BoQ shall be given to the Contractor, except for the water quality analysis and noise measurement. The Contractor had to include these costs in the other items of the BoQ. Real expenditures of water quality analysis and noise measurement in scope defined by the BDs and the Contract shall be compensated to the Contractor in the form of the particular item in the BoQ;

- For noncompliance with requested environmental mitigation measures and monitoring activities the Contractor shall suffer specific liquidated damages in a form of demerit points. Demerit points are provided as a measure that should stimulate the Contractor to carry out his obligations in an organized and timely way and to perform his duty meeting high standards even though those tasks does not appear to be of a serious nature. Demerit points have in the same time two meanings – numeric and monetary.
- Each demerit point has associated monetary value which represents permanent payments reduction for determined noncompliance of the contracted obligations.
- Number of received demerit points has cumulative effect. If during the Contract the Contractor receives more than certain number of demerit points specified in the BDs and the Contract, the Contractor will for a period of 2 years not be allowed to compete for any other PERS works contract.
- Also, if the Contractor is awarded over a specified number of demerit points, the Employer has a right to terminate the Contract. Monetary value of each demerit points as well as limits for other possible actions by the Employer is specified in the BDs and the Contract.
- Application of explained two measures - compensation for specific costs and penalties for noncompliance – should assure implementation of all requested environmental mitigation measures and monitoring activities;

III. Explicitly require the Contractor to recruit an environmental specialist. The Contractor will be responsible for the implementation of environmental mitigation measures during construction and shall employ an environmental specialist who will supervise implementation of the Contractor’s environmental responsibilities and coordinate with the PERS and MoT. The Contractor, in coordination with PERS, shall set-up a complaint redress committee that will address any complaints during project implementation. During project implementation, the PERS shall monitor the compliance of the Contractor with the EMP provisions. It is proposed that the project supervision consultants (PSC) employ an environment specialist (with civil engineering/environmental management background) to assist the environmental supervision.

Upon Project completion, the PERS will be in charge of the operation and maintenance of the Project Road. Routine and random monitoring will be undertaken as scheduled in the monitoring plan.

Contractor will make proposal for environmental protection, including safety of persons associated with the works and the public, during a pre-construction period within the Environmental Management Plan. This proposal will be reviewed by PERS in order to obtain the “no objection” to the proposal’s recommendations. In this regard, attention will be given to:

- Taking all reasonable steps to protect the environment on and off site and avoid damage or nuisance to persons or property arising from its operations,
- Maintaining conditions of safety for all persons entitled to be on site and
- Provision of all lights, guards, fencing, warning signs, traffic control and watching for protection of the works and other property and for the safety and convenience of the public.

During the implementation of this Project, the public has the right to participate either directly or indirectly, which introduces the possibility to present its interests and opinion in the process of decision making. In order to reach the best option during this process, PERS will disclosed this EMP document to public, including local municipalities and NGOs (See Appendix V). Draft EMP document will be published on PERS web site too (www.putevi-srbije.rs). During process of public consultations interested public will collect all project information, including all environmental issues related to this project. Opinions and suggestions will be incorporated within the final version of EMP document.

During rehabilitation works, a public liaison officer, named by the Contractor will establish communication with the local residents affected with the project and will be responsible to inform them about all project activities, especially related to environmental impacts of the project and planed mitigation measures.

Reporting Arrangements

Public consultation and presentation of EMP will be hold and the report will be accompanied by the EMP.

Contractor will provide quarterly reports to the PERS which document the environmental mitigation and protection measures, together with prescribed monitoring activities carried out during the reporting period. Contractor will take care on environment quality according to the mitigation and monitoring plan and will report to the PERS.

If any kind of accident or endangerment of environment happens, reporting will be immediate. Contractor will inform the project manager and local authorities about accidents immediately after it happened. In case that project manager is not responding on a call, the Contractor will inform PERS about the accident.

A Complaint Mechanism will be implemented to ensure that all complaints from local communities are dealt with appropriately, with corrective actions being implemented, and the complainant being informed of the outcome. It will be applied to all complaints from affected parties. A complaint form is attached in Appendix IV and hard copies will be made available at community centres.

REFERENCES

- Environmental Assessment No. 25, environment management plans, the World Bank's Department for the environment, January 1999.
- the roads and the environment: a handbook, the World Bank's Department for the environment
- the European Investment Bank, Handbook of environment and social practices, Office of environment and social issues, version 2 24/02/2010.
- the European Bank for reconstruction and development, the environment and social policy in 2008.
- the European Investment Bank, the environmental and social principles and standards (2008)
- Environmental Management Plan for the rehabilitation of roads, bridges and tunnels, under a World Bank project, management of roads and traffic safety, Republic of Srpska, directorates, Banja Luka, 2001.
- Evaluation Report of the environment and Environment Management Plan for Serbia's Project of rehabilitation of transport, Report No: E866, project title: YF-Project of rehabilitation of transport – Nr. P075207, document date 30.11.2003.

Appendix I

MITIGATION PLAN

Phase	Issue	Mitigating measure	Responsibility		Comments
			Contractor	Supervision	
PRE-CONSTRUCTION	**Main Design phase**				
	Respect for the procedures related to the protection of the environment	The designer has obtained nad implemented the requirements of the relevant institutions related to environmental issues (Ministry of Agriculture and Environmental Protection, Institute for Nature Conservation, the Institute for Protection of Cultural Monuments of Kraljevo and Srbijavode) to prevent risks to the environment during the intensive maintenance.	PERS / Designer	Technical control / PERS	
	Choosing a location for the facilities of the Contractor and site organization	The location must be approved by the PE. It is forbidden to form a location (site) for a temporary delay (storage) and other necessary construction materials and equipment, in the area of the river banks zone of the River Uvac (blue zone), as well as areas of high vegetation. Locations will be selected so as not to affect the environment and social affairs good surrounding	Designer / Contractor	Supervisor / ЈППС	

		settlements (noise, dust, vibration). The limited size of Contractors objects, will reduce unnecessary vegetation clearing, waste production. Waste water will be treated before being discharged into surface water systems Concrete surfaces, including parking for vehicles, workshops and fuel storage areas should be equipped with oil and water separator, and fuel storage areas must be located more than 20m from the water flow. Avoid excess mechanical obstruction of the surface layers of soil. Prevention of soil erosion at the site. Limit the excavation area to prevent possible soil erosion. Avoid excavation and the work with machines in wet soil conditions.			
	Road safety issues associated with pedestrian crossing	Plan for safe and adequate pedestrian crossing facilities equipped with ramps and structures that allow the use of wheelchairs, pushcarts, bicycles and prams.	Designer	Technical Control / PERS	
	Purification of waste water from the road	Provided a solution for the purification of waste water in the area of the bridge across the River Goracanka Adistanka, as well as on the road sections along the River Uvac. Water from the pavement and bridges will be	Designer	Technical Control / PERS	

		collected by channels and lead to waste water treatment systems that will be placed close to recipient, and all in accordance with the terms of the MoAEP.			
	Landfills near the road	Locate the existing landfill, check their status and existence of valid documentation (approvals, authorizations, permits for the construction, operation ...). If it is determined that the landfill do not have the necessary valid documentation (licenses), anticipate the project to enclose the landfill, close connection to the existing road and do roadside greening. Propose local institutions to find a lasting solution to the problem of waste disposal in accordance with the Waste Management Law and the Regulation on Waste Disposal.	Designer / Contractor / Local institutions	Technical Control / / Supervisor	
	Informing interested parties	Details of the proposed road alignment, access points, and security features, will be published on the site of the planned works. Feedback from local actors will be requested to record. Evidence of consideration of this information, enclose in main designs.	Designer	Technical Control / PERS	
CONSTRUCTION	**Site Induction**				

	Safety on the site	All workers and visitors to site shall pass Health& Safety and Environment training and be instructed in the need and use of PPE.	Contractor H&S and environmental officer	Supervisor	
	Participation of stakeholders	Details of the proposal route, access points and security issues will be discussed at the site of the planned works. Feedback from local shareholders will be requested and registered. Evidence on how to implement the adopted suggestions in the final project will also be logged.			
	MANAGEMENT PLANS Contractor to prepare the following plans as described in the EMP to ensure compliance with legislative and Lender requirements. • Site organisation plan, • Sewage and septic management, • Project complaint mechanism), • Soil Management Plan, • Dust management plan, • A plan indicating the location of the proposed material extraction site as well as rehabilitation measures to be implemented for the borrow areas and access roads upon project completion, • Waste and wastewater management plan in accordance with the Law on Waste management (“Official Gazette of RS”, 36/09), • Oil and fuel storage management plan, • In-river works management plan, • Camp management plan.		Contractor	Supervisor/ PERS	

	• Emergency response plan. • Rehabilitation Plan • Safety and Hazard Assessment • Safety and Labour Management Plan (SLMP),				
CONSTRUCTION	**Material supply**				
	asphalt base dust, fumes, health effects and work safety, ecosystem disturbances	utilization of existing asphalt bases, requirement of official approval or valid operation license	Asphalt plant	Asphalt plant	Supplier from the offer / approved supplier
	Stone quarry dust, fumes, health effects and work safety, ecosystem disturbances	utilization of existing quarries, requirement of official approval or valid operation license	Contractor / Stone quarry	Supervisor	
	Sand and gravel excavation sites riverbed and water quality disturbances, ecosystem disturbances	utilization of existing excavation sites or purchase of material from registered producers, requirement of official approval or valid operation license	Contractor / sand and gravel excavation management	Supervisor	
	Concrete base	utilization of existing concrete base or purchase of concrete slabs from registered dealers, material	Contractor / concrete base	Supervisor	

	dust, fumes, health effects and work safety, ecosystem disturbances	should include appropriate quality attestation	management		
CONSTRUCTION	**Transport of materials**				
	Asphalt dust, fumes	All trucks are to be covered	Contractor	Supervisor	
	Stone / Dust	Wet / cover truck load	Contractor / truck driver	Supervisor	
	Sand, gravel, dust	Wet or cover truck load	Contractor / truck driver	Supervisor	
	Cement, concrete	Remove fresh concrete that has spilled from the in-transit mixers from transport roads within 6 hours	Contractor / truck driver	Supervisor	
	Traffic management noise, vehicle exhaust, road congestion	Respect working hours (preferably 8-16h); use alternative routes to minimize major traffic sites Adequate temporary road signalization	Contractor / Transport manager; Truck operator	Supervisor	
CONSTRUCTION	**Construction site**				
	Noise effects to local	Limit activities to daily working hours (no works	Contractor	Supervisor	

	residential blocks, fauna and workers	between 8 PM and 7 AM) or conduct them during the cited period, but with consent of the residents and management; Utilization of construction machinery with noise abatement equipment; ensure maximum functionality of machinery by regular (periodic) or extraordinary technical checkups of vehicles and equipment;			
	Dust	Implement measures to avoid/minimize dust emissions, wetting /spraying the site, accesses, materials stockpiles and during loading/unloading activities; covering of vehicles carrying dusty materials; wheel washing/spraying of vehicles; speed limit of vehicles, site cleaning	Contractor	Supervisor	
	Vibrations	Limit activities to daily working hours (no works between 8 PM and 7 AM) or conduct them during the cited period, but with consent of the residents and management	Contractor	Supervisor	
	Traffic disruption during construction activity	Traffic management plan with measures to redirect traffic that are easily seen or easy to follow; include traffic police assistance if needed Construction Traffic Management Plan will establish speed limits for construction vehicles and organize traffic to avoid as much as possible populated areas. Local residents will be kept	Contractor	Construction Contractor	

		informed of planned works			
	Reduced access to roadside activities	Provide alternative access to roadside activities at all times	Construction Contractor	Construction Contractor	
	Vehicle and pedestrian safety when there is no construction activity	Lighting and well defined safety signs and protection measures.	Construction Contractor	Construction Contractor	
	Water and soil pollution from improper material storage, management and usage	Organize and cover material storage areas; isolate concrete, asphalt and other works from watercourse by using sealed formwork or covers; isolate wash down areas of concrete and asphalt trucks and other equipment from watercourse by selecting areas for washing that are not free draining directly into watercourse. Operate construction site in a way to reduce the risk of generating sediments and wastewater that may pollute local soils or receiving water bodies (considering situations such as including stormwater runoff, wastewater generated from facilities on site such as wheel washing facility). Soil Management Plan shall be prepared for the controlled removal of top soil, storage and reuse. Prevent sediments flowing into surface waters and drainage channels by localised control measures (e.g. sediment fences, check dams, mulch barriers, rock groynes, or geofabric barriers,	Construction Contractor	Construction Contractor	

		sediment basins), contouring to optimise slope angle and steepness, Prevent wind erosion via fencing, covering, etc.			
	Water and soil pollution from improper disposal of waste materials	Storage of wastes according to international best practice (IFC EHS General Guideline). Apply additional measures for storage of hazardous wastes (such as use of secondary containment, access restriction, provision of PPE etc.) as necessary to prevent harm to construction staff, environment and public. Use and labelling of designated waste collection containers and storage areas for different kinds of wastes (hazardous and non-hazardous).	Construction Contractor	Construction Contractor	
	Potential contamination of soil and water from improper maintenance and fuelling of equipment	Apply best engineering practice in safe storage and handling of lubricants, fuel and solvents by secured storage; ensure proper loading of fuel and maintenance of equipment; collect all waste and dispose to permitted waste recovery facility	Construction Contractor	Construction Contractor	
	Workers safety	Provide workers with safety instructions and protective equipment; safe organization of bypassing traffic	Construction Contractor	Construction Contractor	

	Landscaping	Undertaking of re-vegetation progressively with cover crop and native endemic species and monitor its effectiveness. Where initial plantings were not successful, replacement plantings will be carried out.			
	Chance of Archaeological finds	In case of archaeological finds Contractor is obliged to stop the works immediately and inform institute for protection of Cultural Monuments and PERS about it.	Contractor	Supervisor	
CONSTRUCTION	**Specific measures**				
	Institute for Nature Conservation of Serbia	- envisage in the design such a solutions and measures that will ensure the conditions for the preservation of air, soil, groundwater and surface water, especially along the river Uvac whose flow is part of the road section - design should contain a part relating to the site organization - during the construction works strictly comply with the route corridor. Use the existing road network. Do not build new roads. - envisage oil and grease separators for treatment of waste water, especially along the River Uvac. - During the construction works in the vicinity of residential buildings plan spraying to prevent dust rising and a negative effect on people - It is not allowed to service vehicles along the road - take measures to protect citizens from accidents - during construction along the route maintain the maximum level of the communal order - after completing rehabilitation works it is necessary as soon as possible to remove all			

		equipment and construction material			
	Institute for Protection of Cultural Monuments Kraljevo	- it is necessary the presence of archeologist during earthworks in defined areas (zones 1 and 2 on the map in the appendix) at which the existence of the of archaeological assets under previous protection is known. The investor is obliged to inform the Institute 15 days before the commencement of works in order to organize Archaeologist which monitors the work and can prescribe additional requirements in accordance with the situation on the site. - in case that during earthworks on other parts of the route are found new archaeological remains of the material culture the investor/contractor is obliged to immediately suspend the works and notify the competent institution - the contractor is obliged to take measures to protect the sites from damage - It forbids unautorised digging, taking away stones and soil from the site - It forbids unautorised collecting of archaeological material - it forbids spills and disposal of waste and hazardous material, storage material and the creation of dumps on goods under previous protection - it forbids the displacement and destruction of gravestones			
OPERATION	**Maintenance**				
	Noise disturbance to	Limit activities to daylight working hours (not	Road	Road	To be

	human and animal population and workers	between 8 p.m. and 7 a.m. or as agreed with public); equipment operating with noise mufflers	maintenance company	maintenance company	specified in maintenance contract documents-Technical Specifications for realization of maintenance works
	Possible air, water and soil pollution dust, vehicle exhaust, fuel and lubricants spills	Apply best engineering practice in safe storage and handling of lubricants, fuel and solvents by secured storage; ensure proper loading of fuel and maintenance of equipment; collect all waste and dispose in line with the Law on waste management; organize and cover material storage areas; isolate asphalt from watercourse by using sealed formwork; selecting areas for washing that are not free draining directly or indirectly into watercourses; dispose waste material at location protected from washing out	Road maintenance company	Road maintenance company	
	Vibrations	Limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public and authorities)	Road maintenance company	Road maintenance company	
	Workers safety	Provide safety measures for the workers along with the appropriate equipment; safe organization	Road maintenance	Road maintenance	

		through alternative roads and appropriate traffic signalization. All workers and visitors to site shall be given a Health, Safety and Environment Induction and instructed on the need to use of PPE.	company	company	
	Maintenance	Regularly maintain curbs; mow and maintain the grass and dispose of it in a landfill; regularly clean drainage structures (drains) and dispose of the waste material in a registered landfill; regular cleaning of road surface, filling of holes, binders and cracks; the remains of asphalt originating from works on hole filling should be transported and disposed of in an appropriate landfill for construction materials; conduct regular and timely interventions of cleaning road surface and surrounding road structures in case of a traffic accident or tanker and other trucks overturning; conduct repairs	Road maintenance company	Road maintenance company	
	Increased vehicle speed	Install traffic signs for speed limit	Road maintenance company	Road maintenance company	To be specified in TS for maintenance works
	Erosion, rock fall, hazardous conditions	install warning signs (rock fall, landslide, wet or slippery conditions, dangerous curve, animal or pedestrian crossing, school, slow moving vehicles,	Road maintenance company	Road maintenance company	

		merge), reflective markers to indicate steep edge or convex mirrors to see oncoming traffic at blind curves; locate warnings at points considered necessary by good engineering practice, or as agreed in writing with public and authorities			

Appendix II

MONITORING PLAN

Phase	What is the *parameter to be monitored?*	Where *the parameter should be monitored?*	How *the parameter should be monitored?/ type of monitoring equipment*	When *the parameter should be monitored? (frequency of measurement or continuous)*	*Why the parameter should be monitored? (optional)*	Institutional responsibility Operate
CONSTRUCTION			**Material supply**			
Asphalt base	Possession of official approval or valid operating license	Asphalt plant	Inspection / supervising engineer	Before work begins	Assure compliance with environment, health and safety requirements	Base Operator
Stone quarry	Possession of official approval or valid operating license	Stone quarry	Inspection / supervising engineer	Before work begins		Quarry Operator

Phase	What is the *parameter to be monitored?*	Where *the parameter should be monitored?*	How *the parameter should be monitored?/ type of monitoring equipment*	When *the parameter should be monitored? (frequency of measurement or continuous)*	*Why the parameter should be monitored? (optional)*	Institutional responsibility Operate
Sand and gravel borrow pit	Possession of official approval or valid operating license	Sand and gravel borrow pit or separation	Inspection / supervising engineer	Before work begins		Borrow pit or Separation Operator
CONSTRUCTION			**Material transport**			
Asphalt	Truck load covered	Job site	Supervising engineer	Unannounced inspections during work, at least once per week	Assure compliance of performance with environment, health	Supervision Contractor
Stone	truck load covered or wetted	Job site	Supervising engineer	Unannounced inspections during work, at least once per week	and safety requirements and enable as	Supervision Contractor
Sand and gravel	truck load covered or wetted	Job site	Supervision	Unannounced inspections during work, at least once per week	As little as possible disruption to traffic	Supervisor/ Contractor

Phase	What is the *parameter to be monitored?*	Where *the parameter should be monitored?*	How *the parameter should be monitored?/ type of monitoring equipment*	When *the parameter should be monitored? (frequency of measurement or continuous)*	*Why the parameter should be monitored? (optional)*	Institutional responsibility Operate
Traffic management	hours and routes selected	Job site	Supervision	Unannounced inspections during work, at least once per week		Supervisor / Contractor
CONSTRUCTION			**Construction Site**			
Noise disturbance to workers and neighbouring population	Noise levels	Job site; nearest homes of settlements along the site	Equipment – hand-held analyser with application software	Once at the beginning of the project, on half basis, and on complaint. If the results of monitoring are not satisfactory, monitoring should be conducted on monthly basis	Assure compliance of performance with environment	Contractor
Water and soil pollution from improper material storage, management and usage	Water and soil quality (suspended solids, oils, pH value, conductivity)	Watercourses	Unannounced sampling; analysis at accredited laboratory with necessary equipment	Monitoring should be done prior construction (on a referent point upstream of construction site) and once during rehabilitation works. If the results of monitoring are not satisfactory, monitoring should be repeated on monthly basis till the completion of works on the location	Assure compliance of performance with environment	Contractor

Phase	What is the *parameter to be monitored?*	Where *the parameter should be monitored?*	How *the parameter should be monitored?/ type of monitoring equipment*	When *the parameter should be monitored? (frequency of measurement or continuous)*	*Why the parameter should be monitored? (optional)*	Institutional responsibility Operate
Dust	Air pollution (solid particles)	At and near job site	Inspection and visual observation	Unannounced inspections during material delivery and construction	Health and safety requirements and enable as little disruption to traffic as it is possible	Supervision / Contractor
Vibrations	Limited time of activities	Construction Site	Supervision	Unannounced inspections during active operations and due to complaints		Supervision / Contractor
Traffic disruption during construction activity	Existence of traffic management plan; traffic patterns	At and near job site	Inspection; observation	Before works start; once per week at peak and non-peak periods		Supervision Contractor
Reduced access to roadside activities	Provided alternative access	Job site	Supervision	Random checks at least once per week during construction activities		Supervision Contractor

Phase	What is the *parameter to be monitored?*	Where *the parameter should be monitored?*	How *the parameter should be monitored?/ type of monitoring equipment*	When *the parameter should be monitored? (frequency of measurement or continuous)*	*Why the parameter should be monitored? (optional)*	Institutional responsibility Operate
Vehicle and pedestrian safety when there is no construction activity	Visibility and appropriateness	At and near job site	observation	Random checks at least once per week in the evening		Supervision Contractor
Workers safety	protective equipment; organization of bypassing traffic	Job site	inspection	Unannounced inspections during work.		Supervision Contractor
OPERATION			**Maintenance**			
Noise disturbance to human population and workers	Noise levels	Job site; nearest homes	Equipment – hand-held analyser with application software	Unannounced inspections during maintenance activities and on complaint	Assure compliance of performance with environment, health and safety requirements	PERS
Vibrations	Limited time of activities	Job site	Supervision	Unannounced inspections during maintenance activities and on complaint		PERS

Phase	What is the *parameter to be monitored?*	Where *the parameter should be monitored?*	How *the parameter should be monitored?/ type of monitoring equipment*	When *the parameter should be monitored? (frequency of measurement or continuous)*	*Why the parameter should be monitored? (optional)*	Institutional responsibility Operate
Workers safety	protective equipment; organization of bypassing traffic	Job site	Inspection	Unannounced inspections during maintenance activities and on complaint		PERS
OPERATION			**Road Safety**			
Increased vehicle speed	Condition of traffic signs; vehicle speed	Road section included in project	Visual observation; speed detectors	During maintenance activities; unannounced	Enable safe and economical traffic flow	Maintenance Contractor; Traffic Police
Erosion, rock fall, hazardous conditions	Road section included in project	Condition of hazard signs	Visual observation	During maintenance activities		Maintenance Contractor

Suggestion form-additional information to be included in the plans of observation-monitoring:

1. General		
Is the project materially compliant with all relevant Performan Requirements (taking account of agreed action plans, exemptio or derogations)?	Yes ❑ No ❑	If no, please provide details of any material non-compliances:
Is the project materially compliant with all applicable environmen and social laws and regulations?	Yes ❑ No ❑	If no, please provide details of any material non-compliances:
Have there been any accidents or incidents that have caus damage to the environment, brought about injuries or fatalitie affected project labour or local communities, affected cultu property, or created liabilities for the company?	Yes ❑ No ❑	If yes, please describe, including details of actions to repair and prevent reoccurrence:
Have there been any changes to environment, social, labour health and safety laws or regulations that have materially affect the company?	Yes ❑ No ❑	If yes, please describe:
How many inspections did you receive from the environmen authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found:
How many inspections did you receive from the health and safe authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found:

How many inspections did you receive from the labour authoriti during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found:
Have these visits resulted in any penalties, fines and/or correcti action plans?	Yes ❑ No ❑	If yes, please describe, including status of implementing corrective actions to address a violations found:
Has the Company engaged any Contractors for project-related wo in the reporting period?	Yes ❑ No ❑	If yes, please state for which types of work, and how the company has monitored the complian of Contractors with Performance Requirements and the Environmental and Social Action Plan:
Were any of the violations stated above the responsibility Contractors?	Yes ❑ No ❑	If yes, please provide details, including how the Company is ensuring that corrective actions a implemented by the Contractor?
Have any operations been reduced, temporarily suspended closed down due to environmental, health, safety or labo reasons?	Yes ❑ No ❑	If yes, please describe:
Please describe any environment or social programmes, initiatives or sub-projects undertaking during the reporting period to improve the company's environmental or soc performance and/or management systems: Please indicate the level of associated expenditure (capital expenditure and operating expenditure), and whether this relates to the requirements of the Environmental and Soc Action Plan, or to any other initiative:		

Appendix III

LEGISLATION

REGULATION AND REQUIREMENTS

This section sets out the regulatory context regarding consultation and public disclosure in Serbia as it relates to this Project. Specific reference is made to relevant Serbian legislation, regional regulatory instruments, and relevant EBRD requirements, the World Bank Policy on Access to Information and WB OP 4.01 Environmental Assessment.

In the juridical system of the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment ("Official Gazette of RS" No. 135/04, 36/09), which is completely in line with European EIA Directive (85/337/EEC, 97/11/EC, 2003/35/EC and COM 2009/378).

The main laws and regulations currently in force in Republic of Serbia which are relevant to the environmental protection during planning, design, construction and operating of this Project are listed below:

1. Law on planning and construction ("Official Gazette of RS" No. 72/2009, 81/2009,64/2010, 24/2011, 42/2013, 145/2014),
2. Law on nature protection ("Official Gazette of RS", 36/09, 88/10, 91/10, 14/16),
3. Law on environmental protection ("Official Gazette of RS" No. 135/04, 36/09, 72/09, 43/11, 14/16),
4. Law on EIA ("Official Gazette of RS" No. 135/2004, 36/2009),
5. Law on Strategic EIA ("Official Gazette of RS" No. 135/2004),
6. Law on waste management ("Official Gazette of RS", 36/09, 88/10, 14/16),
7. Law on noise protection ("Official Gazette of RS", 36/09, 88/10),
8. Law on water ("Official Gazette of RS", 30/10, 93/12),
9. Law on forest ("Official Gazette of RS", 30/10, 93/12, 89/15),
10. Law on air protection ("Official Gazette of RS", 36/09, 10/13),
11. Law on Safety and Health at Work ("Official Gazette of RS", 101/05, 91/15),

Regulations established on the basis of the Law on EIA include the following:

1. Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS" No. 114/08),
2. Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study ("Official Gazette of RS" No. 69/05).
3. A manual of the law about the content of the Studies ("Official Gazette of RS", no. 69/05);
4. A manual of the law procedure of public inspection, presentation and public consultations on EIA Study ("Official Gazette of RS", no. 69/05);
5. A manual of the law of work of technical Committee concerning the EIA study ("Official Gazette Number" No. 69/05);
6. Regulations on allowable noise levels present in the environment ("Official Gazette of RS", no. 54/92);
7. Regulation of classes of water areas ("Official Gazette SRS Nos.. 5/68);
8. Regulation of danger from polluting water (Official Gazette SRS, no. 31/82).

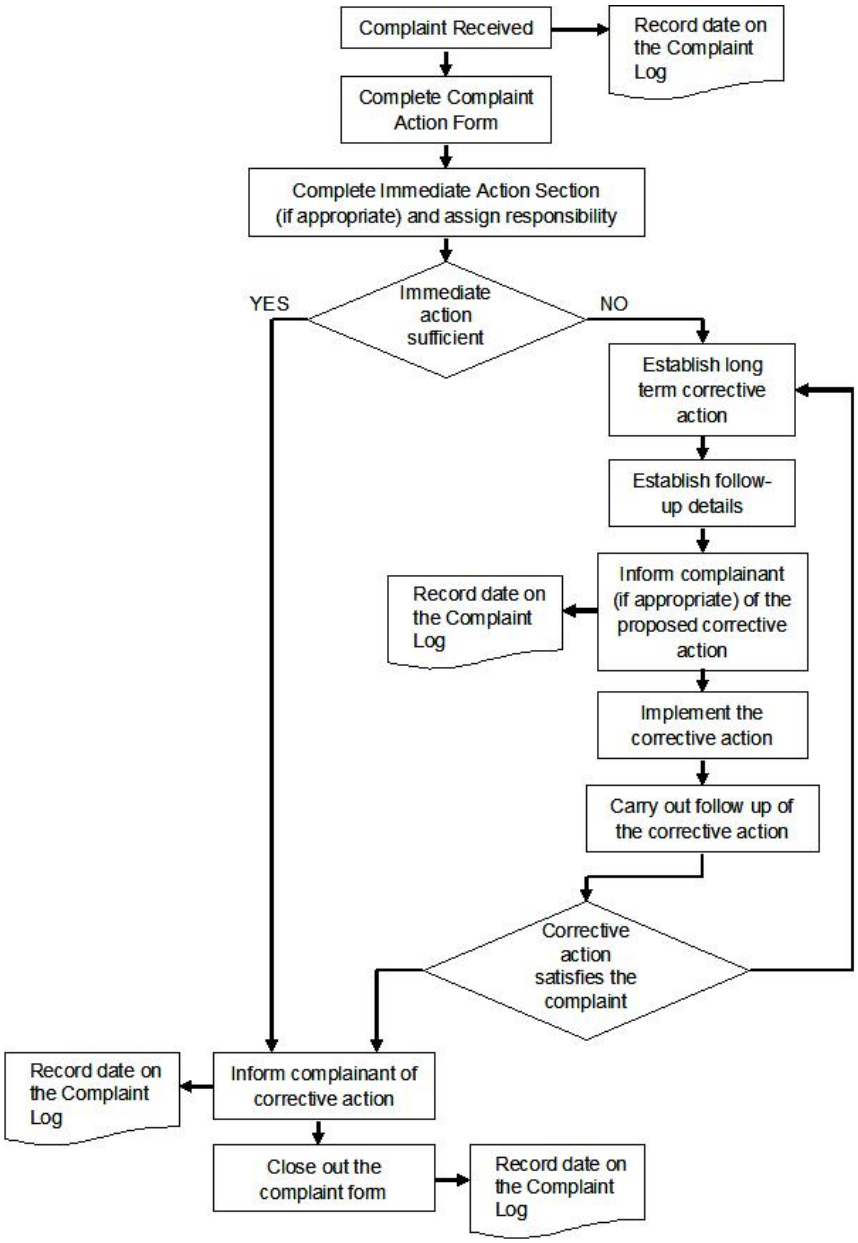
Other relevant Serbian legislation

1. Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area (“Official Gazette of RS”, 38/09),
2. Law on public roads (“Official Gazette of RS” No. 101/2005, 123/07).

Appendix IV

COMPLAINTS MECHANISM

Flowchart of Complaints/Complaint Procedure



<table>
<tr><td colspan="4">Complaint Reference Number (to be filled with number):</td></tr>
<tr><td rowspan="3">Contact Details</td><td colspan="3">Name:</td></tr>
<tr><td colspan="3">Address:</td></tr>
<tr><td colspan="3">Tel:</td></tr>
<tr><td></td><td colspan="3">e-mail:</td></tr>
<tr><td>How would you prefer to b contacted? Please tick box</td><td>By post</td><td>By phone</td><td>By e-mail</td></tr>
<tr><td colspan="4">Name and the identification information (from identity card).</td></tr>
<tr><td colspan="4">Details of your complaint. Please describe the problems, who it happened to, whe where and how many times, as relevant</td></tr>
<tr><td colspan="4">What is your suggested resolution for the complaint?</td></tr>
<tr><td rowspan="3">How to submit this for to /[name concessionaire]</td><td colspan="3">By Post to: [tbc]</td></tr>
<tr><td colspan="3">By hand: please drop this form at [tbc]</td></tr>
<tr><td colspan="3">By e-mail: Please email your complaint, suggested resolutic and preferred contact details to: [tbc]</td></tr>
<tr><td>Signature</td><td></td><td>Date</td><td></td></tr>
</table>

Appendix V

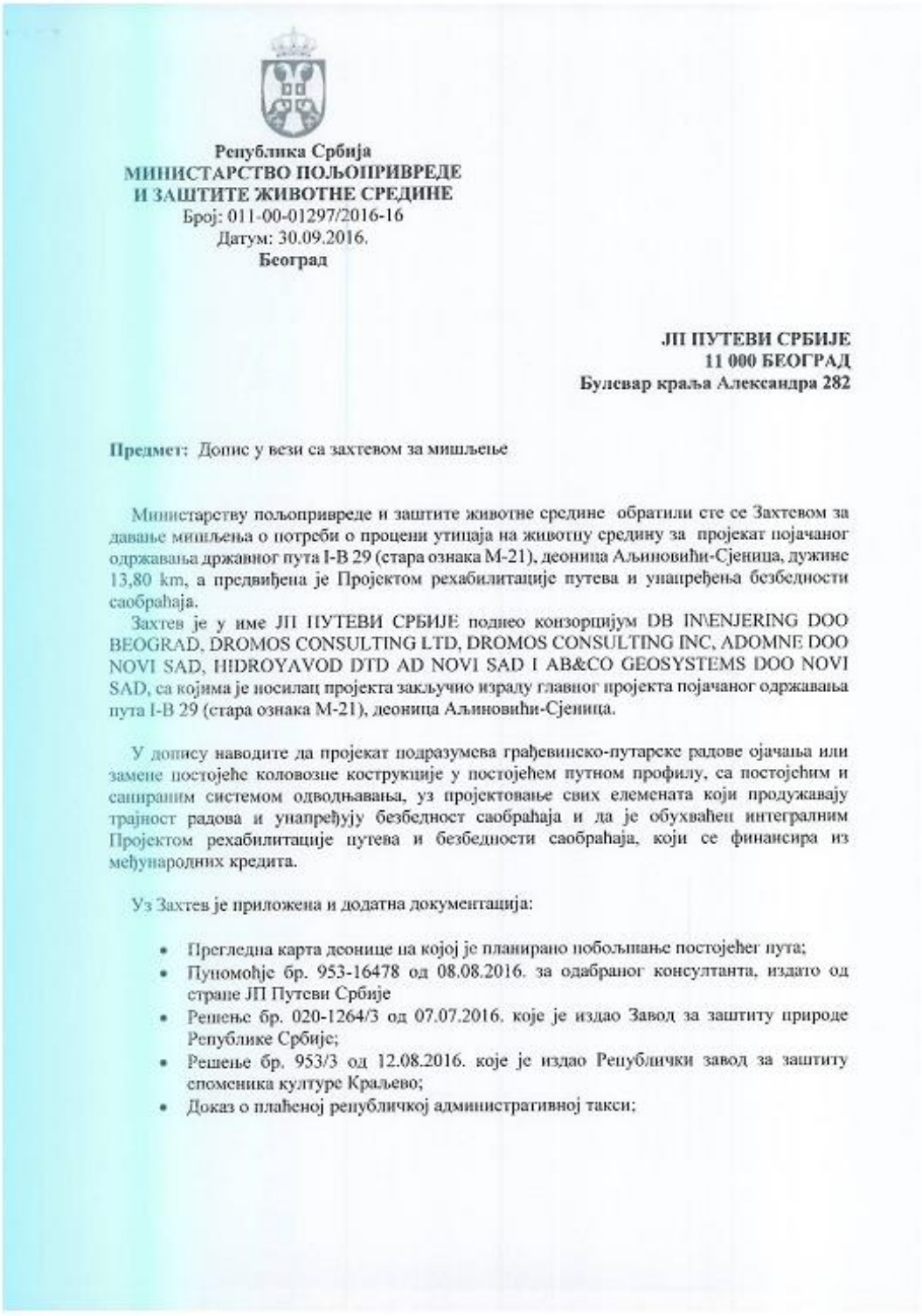
PUBLIC CONSULTATIONS

This Appendix will be completed after Public Consultations

Appendix VI

PRECONDITIONS OBTAINED FROM RELEVANT INSTITUTIONS

a) Final Environmental Approval



Република Србија
МИНИСТАРСТВО ПОЉОПРИВРЕДЕ И ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ
Број: 011-00-01297/2016-16
Датум: 30.09.2016.
Београд

ЈП ПУТЕВИ СРБИЈЕ
11 000 БЕОГРАД
Булевар краља Александра 282

Предмет: Допис у вези са захтевом за мишљење

Министарству пољопривреде и заштите животне средине обратили сте се Захтевом за давање мишљења о потреби о процени утицаја на животну средину за пројекат појачаног одржавања државног пута I-B 29 (стара ознака M-21), деоница Аљиновићи-Сјеница, дужине 13,80 km, а предвиђена је Пројектом рехабилитације путева и унапређења безбедности саобраћаја.

Захтев је у име ЈП ПУТЕВИ СРБИЈЕ поднео конзорцијум DB IN\ENJERING DOO BEOGRAD, DROMOS CONSULTING LTD, DROMOS CONSULTING INC, ADOMNE DOO NOVI SAD, HIDROYAVOD DTD AD NOVI SAD I AB&CO GEOSYSTEMS DOO NOVI SAD, са којима је носилац пројекта закључио израду главног пројекта појачаног одржавања пута I-B 29 (стара ознака M-21), деоница Аљиновићи-Сјеница.

У допису наводите да пројекат подразумева грађевинско-путарске радове ојачања или замене постојеће коловозне конструкције у постојећем путном профилу, са постојећим и санираним системом одводњавања, уз пројектовање свих елемената који продужавају трајност радова и унапређују безбедност саобраћаја и да је обухваћен интегралним Пројектом рехабилитације путева и безбедности саобраћаја, који се финансира из међународних кредита.

Уз Захтев је приложена и додатна документација:

- Прегледна карта деонице на којој је планирано побољшање постојећег пута;
- Пуномоћје бр. 953-16478 од 08.08.2016. за одабраног консултанта, издато од стране ЈП Путеви Србије
- Решење бр. 020-1264/3 од 07.07.2016. које је издао Завод за заштиту природе Републике Србије;
- Решење бр. 953/3 од 12.08.2016. које је издао Републички завод за заштиту споменика културе Краљево;
- Доказ о плаћеној републичкој административној такси;

На основу члана 4. ст. 1. и 3. Закона о процени утицаја на животну средину („Сл. гласник РС“, 135/04 и 36/09) донета Уредба о утврђивању Листе пројеката за које је обавезна процена утицаја и Листе пројеката за које се може захтевати процена утицаја на животну средину („Сл. гласник РС“, 114/08), којом су утврђени пројекти за које се обавезно израђује процена утицаја-Листа I и пројекти за које се процењује значајан или могућ утицај на животну средину-Листа II.

Пројекат ургентног одржавања, рехабилитације и отклањања оштећења на путевима не налази се на прописаним Листама и, сагласно томе, *носилац пројекта није у обавези* да уђе у процедуру процене утицаја, у складу са Законом о процени утицаја на животну средину („Сл. гласник РС“ 135/04 и 36/09). Носилац пројекта је у обавези да се у свему придржава услова и мера прописаних по посебним законима.

Помоћник министра
По решењу о овлашћењу
бр. 021-01-43/2015-01 од 17.08.2016.

Александар Весић

Доставити:
-наслову
-архиви

b) Oppinion from Institutions for Water management

ЈВП "Србијаводе" - ВПЦ "Сава-Дунав"
Нови Београд, ул. Бродарска бр. 3, тел. 011/20-18-100
Број: 1-3759 /1
Датум: 26 SEP 2016
АК

На основу *члана 118. став 4. Закона о водама („Сл. гласник РС", број 30/2010)*, а у складу са *Правилником о садржини и обрасцу захтева за издавање водних аката и садржини мишљења у поступку издавања водних услова („Сл. гласник РС", број 74/2010)*, решавајући по захтеву „АДОМНЕ" д.о.о. бр. 297/2016 од 26.08.2016. године, а у име ЈП „Путеви Србије", Булевар Краља Александра бр. 282, (ПИБ: 104260456, МБ: 20132248), Јавно водопривредно предузеће "Србијаводе" – Водопривредни центар "Сава – Дунав", Београд, издаје

М И Ш Љ Е Њ Е

у поступку издавања водних услова

1. Општи подаци:

1.1 Назив: Израда техничке документације појачаног одржавања државног пута Iб реда бр.29 деоница: Пријеполье-Сјеница3 (Мердаре) L=13,8 km.

1.2 Хидрографски подаци:
- најближи водоток: река Увац,
- подслив: реке Дрине,
- водно подручје: Сава.

1.3 Хидролошки подаци:----

1.4 Остали подаци:
Уз захтев инвеститор је приложио:
1. Прегледну ситуацију са уцртаном трасом пута;
2. Технички опис радова.

2. Подаци од значаја за издавање водних услова:
Предвиђена је израда Пројеката појачаног одржавања државног пута Iб реда бр.29 деоница: Пријеполье-Сјеница3 (Мердаре) L=13,8 km. Предметни пројекат је саставни део Пројекта рехабилитације путева и унапређења безбедности саобраћаја у оквиру пројеката подршке међународних финансијских институција Влади републике Србије у имплементацију Националног програма рехабилитације државне путне мреже. Овај пројекат представља реализацију прве фазе Владиног програма за период 2014.-2019. године.

3. Други карактеристични подаци (ограничења, обавеза и др.):
Да би се заштитили од поплава, потребно је да се изврше радови којима ће се осигурати одрон пута, а неће погоршати режим течења и изазвати негативне последице узводно и низводно од места радова.

Инвеститор је дужан да обезбеди услове за израду техничке документације, а у складу са важећим прописима који дефинишу обавезу избора оптималних техничких решења чијом се реализацијом и експлоатацијом може обезбедити заштита режима површинских и подземних вода и животне средине у целини.

Поштујући прилике у сливу, степен ерозије, пронос и исталожавање наноса као и његову количину и структуру, при изради техничке документације потребно је да надлежни орган пропише услове који морају да се испуне при изградњи објекта.

1. Техничку документацију урадити у складу са важећим техничким прописима и нормативима, на основу прибављених водних услова и пројектног задатка, од стране пројектног привредног друштва, односно другог правног лица или предузетника, регистрованих за израду техничке документације објеката ове врсте, у складу са одредбама Закона о планирању и изградњи ("Сл. гласник РС", број 72/2009, 81/2009 – испр., 64/2010 – одлука УС, 24/2011 и 121/2012,42/2013-одлукаУС, 50/2013- одлукаУС, 98/2013- одлукаУС, 132/2014 и 145/2014) и Закона о водама(„Сл. гласник РС“ број 30/2010).

2. За потребе предметне Техничке документације неопходно је претходно извршити детаљно геодетско снимање кота терена, на основу чега треба обрадити и ажурирати квалитетан катастарско – топографски план, оптималне размере као квалитетне подлоге за будуће пројектовање.

3. На катастарско–топографском плану, нанети коридор трасе водотока, уз тачан приказ бројева и власника катастарских парцела, веродостојно из копије плана као и извода из листова непокретности за све предметне парцеле у оквиру будућег пројектовања.

4. На основу добијених података из претходне тачке, Инвеститор је обавезан да за локацију планираних радова реши претходно потребне имовинско–правне односе са власницима предметних парцела као и да обезбеди све евентуално потребне услове и сагласности од власника других објеката комуналне инфраструктуре, у зонама граничења или укрштања већ постојећих изграђених или планираних предметних објеката са планираним објектима.

5. Сагледати узводне и низводне услове у сливу и на основу тога одредити зону интервентних радова.

6. На предметној деоници урадити хидраулички прорачун великих вода и извршити потребну хидрауличку анализу.

7. На основу спроведених прорачуна и анализа, предвидети потребне заштитне објекте за усвојени меродавни протицај min $Q_{1\%}$.

8. Несме се угрозити стабилност дна водотока и обала на предметној деоници.

9. У циљу безбедности постојећих мостова и пропуста извршити проверу хидрауличке пропусне моћи и на основу тога предложити њихову замену (уколико не задовољавају критеријум за пропуштање великих вода-према мишљењу РХМЗ-а).
Доња ивица конструкције моста мора да буде изнад коте меродавне велике воде $Q_{1\%}$ за:

$Q_{1\%}$ (m^3/s)	10-50	50-100	100-200	200-300	300-500	500-1000
Δh (m)	0,7	0,8	0,9	1,1	1,2	1,3

10. Неопходно је изабрати оптималну варијанту у циљу уређења целовитог система заштита је потребно урадити графичке прилоге, предмер и предрачун и дефинисати динамику реализације предвиђених радова.

11. Прибавити Мишљење РХМЗ-а у складу са чланом 118. став 4. Закона о водама („Сл. гласник РС", број 30/2010).

* * *

Након издавања овог мишљења, а пре израде техничке документације, инвеститор је у обавези да од Министарства за пољопривреду и заштиту животне средине – Републичка дирекција за воде, прибави водне услове сходно члану 118. ЗОВ-а.

ДИРЕКТОР

Душан Пашић, дипл.инж.

Доставити:
- подносиоцу захтева;
- одељењу за коришћење и газдовање водама;
- архиви x2.

c) Preconditions from Institute for Nature Protection

Република Србија
ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
03 Број: 020-1264/3
Датум: 07.02.2016.
Нови Београд, Др Ивана Рибара бр. 91
Тел: +381 11/2093-802; 2093-803
Факс: + 381 11/2093-867

15-09-2016

Завод за заштиту природе Србије, на основу члана 9. Закона о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 и 14/2016) и члана 192. став 1. Закона о општем управном поступку („Службени лист СРЈ", бр. 33/1997 и 31/2001 и „Службени гласник РС", бр. 30/2010), поступајући по захтеву Јавног предузећа „Путеви Србије" из Београда за издавање услова заштите природе за израду техничке документације пројекта Појачано одржавање деонице државног пута IБ реда бр. 29 (стара ознака: магистрални пут М-8), деоница Аљиновић – Сјеница, доноси

Р Е Ш Е Њ Е

1. Предметно подручје (деоница пута) се не налази унутар заштићеног подручја за које је спроведен или покренут поступак заштите, али је једним својим делом у обухвату простора еколошке мреже, еколошки значајног подручја – Увац и Милешевка. Сходно томе, издају се услови заштите природе:

   1) Пројектом предвидети таква решења и мере који ће обезбедити услове за очување ваздуха, земљишта, подземних и површинских вода, посебно реке Увац дуж чијег тока је део деонице пута.
   2) Саставни део предметног Пројекта треба да буде и део који се односи на организацију градилишта, при чему је неопходно дефинисати и обезбедити:
      - привремене локације за складиштење потребног грађевинског и другог материјала и опреме, које је неопходно поставити ван обалског појаса реке Увац (плавне зоне), као и простора са високом вегетацијом, и ограничити их искључиво на време трајања радова;
      - привремене или трајне локације (постојеће уређене комуналне објекте/депоније) за одлагање и депоновање шута и другог отпада укључујући и комунални настао у току извођења радова;
      - да се након завршетка предметних радова све површине које су на било који начин деградиране грађевинским и другим радовима, што пре санирају.
   3) При извођењу радова строго се придржавати трасе и коридора пута како се при манипулацији возилима и машинама не би оставиле последице на шири простор. Такође, користити постојећу путну мрежу без изградње нових путева, у циљу спречавања фрагментације простора и постојећих станишта.
   4) Пројектом предвидети таложнике и сепараторе масти и уља за воде које настају спирањем са коловоза, посебно на траси пута дуж реке Увац, у циљу њене заштите од загађења.
   5) У циљу очувања реке Увац дуж чијег тока је деоница пута, Пројектом је неопходно предвидети:
      – да се у току извођења радова максимално очува обалски појас, односно забрани уништавање приобалне вегетације, нарушавање дивљих врста и њихових станишта;

- да се забрани одлагање/депоновање било каквог отпада, посебно грађевинског у обалском појасу и самом кориту реке Увац;
- да се строго води рачуна да у зони моста, преласка пута преко водотока у току извођења радова грађевински материјал не пада у корито реке Увац.

6) Уколико је неопходно уређење у зони прелаза пута (моста) преко Увца предвидети употребу камена и других природних материјала, и у највећој могућој мери избећи бетонирање обала и корита водотока (спровести тзв. натурално уређење водотока) при чему је неопходно максимално очување самог корита, али и обала са постојећом вегетацијом.
7) Током извођења грађевинских радова (подизања асфалта,..) у непосредној близини стамбених објеката, планирати орошавање како би се спречило подизање прашине и негативан утицај на људе.
8) Забрањено је сервисирање возила и машина дуж трасе и коридора пута. Уколико дође до хаваријског изливања горива, уља/мазива и других штетних материја обавезна је санација површине и враћање у пређашње стање.
9) Није дозвољено извођење радова у току ноћних сати због могућег утицаја буке грађевинских машина.
10) Предузети мере заштите становништва од удеса. У том смислу потребно је предвидети постављање заштитних ограда и пешачких прелаза и пролаза на местима где је то најцелисходније, нарочито на локацијама у близини постојећег насеља.
11) Током извођења радова дуж целе трасе одржавати максимални ниво комуналног реда.
12) По изведеним предметним радовима неопходно је што пре уклонити сву механизацију и грађевински материјал, а уколико је дошло до нарушавања простора дуж трасе треба га санирати (култивисати терен, односно успоставити биљни покривач уз одговарајуће врсте које су биолошки постојане у датим климатским условима.

2. Ово Решење не ослобађа подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима.
3. У случају измене Пројекта, потребно је Заводу за заштиту природе Србије поднети нов захтев за издавање услова заштите природе.
4. Уколико подносилац захтева у року од две године од дана достављања овог Решења не отпочне радове и активности за које је ово Решење о условима заштите природе издато, дужан је да од Завода прибави ново решење о условима заштите природе.
5. Такса за издавање овог Решења у износу од 30.000,00 динара је одређена у складу са чланом 2. став 5. тачка 1. Правилника о висини и начину обрачуна и наплате такси за издавање акта о условима заштите („Службени гласник РС", бр. 73/2011, 106/2013). Подносилац захтева је дужан да наведену таксу уплати у корист рачуна Завода у року од 5 дана од дана достављања предрачуна.

Образложење

Јавно предузеће „Путеви Србије" из Београда, Булевар краља Александра 282, 11050 Београд, обратило се Заводу дописом II бр. 953-12603 од 15.06.2016. године, са захтевом за издавање услова заштите природе за израду техничке документације пројекта Појачано одржавање деонице државног пута IБ реда бр. 29 (стара ознака: магистрални пут М-8), деоница Аљиновићи - Сјеница.

На основу достављеног захтева и пратеће документације подносиоца захтева, утврђено је да је планирана израда пројекта Појачано одржавање деонице државног пута IБ реда бр. 29 (стара ознака: магистрални пут М-8), деоница Алиновићи - Сјеница. Предметни Пројекат је саставни део Пројекта рехабилитације путева и унапређења безбедности саобраћаја на мрежи државних путева, који је подршка међународних финансијских институција Националном програму рехабилитације државних путева Републике Србије. Почетак предметне деонице је 2,62 km од места Алиновићи ка општини Сјеница, а крај деонице је на уласку у општину Сјеница. Врста радова која се планира обухвата радове сјечења постојеће коловозне конструкције (на појединим местима до дубине од 50-60 cm) у постојећим габаритима коловоза са постојећим и санираним системом одводњавања.

Увидом у Централни регистар заштићених природних добара Србије и документацију Завода за заштиту природе Србије, а у складу са прописима који регулишу област заштите природе, утврђени су услови заштите природе из диспозитива овог Решења. При томе се имало у виду да се предметно подручје (деоница пута) не налази унутар заштићеног подручја за које је спроведен или покренут поступак заштите, на основу Закона о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 и 14/2016), али је једним својим делом у обухвату простора еколошке мреже, односно еколошки значајног подручја – Увац и Милешевка, према Уредби о еколошкој мрежи („Службени гласник РС", бр. 102/2010).

Законски основ за доношење решења је: Закон о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 и 14/2016); Уредба о еколошкој мрежи („Службени гласник РС", бр. 102/2010).

Предметни радови могу се реализовати под условима дефинисаним овим Решењем, јер је процењено да неће угрозити природне вредности предметног подручја.

На основу свега наведеног, одлучено је као у диспозитиву овог Решења.

Подносилац захтева је ослобођен од плаћања таксе у складу са чланом 18. Закона о републичким административним таксама („Службени гласник РС", бр. 43/2003, 51/2003, 61/2005, 5/2009, 54/2009, 50/2011, 93/2012 и 45/2015).

Упутство о правном средству: Против овог Решења може се изјавити жалба министарству надлежном за послове заштите животне средине у року од 15 дана од дана пријема решења. Жалба се предаје Заводу за заштиту природе Србије.

ДИРЕКТОР
Александар Драгишић

Достављено:
- Подносиоцу захтева
- Архиви х 2

d) Preconditions from Institute for Protection of Cultural Monuments

ЗАВОД ЗА ЗАШТИТУ СПОМЕНИКА КУЛТУРЕ
КРАЉЕВО
Установа културе
од великог значаја
Краљево, Цара Лазара бр. 24
Број: 953/1
Датум: 15.06.2016

ЈАВНО ПРЕДУЗЕЋЕ "ПУТЕВИ СРБИЈЕ"
Ул. 953-12607/16-1
15-06-2016

мм/ла

Завод за заштиту споменика културе Краљево, Краљево, Улица Цара Лазара бр. 24, на основу члана 36 став 1, тачка 4, чл. 99 став 2. тачка 1 и 3, чланa 100 став 1 и чланa 104.109. и 110. Закона о културним добрима („ Службени гласник РС “, бр.71/94, 52/2011-др.закон, 99/2011-др.закон), као и члана 131 Закона о општем управном поступку („Службени лист СРЈ“, бр.33/97 и 31/01), поступајући по захтеву Јавног предузећа "ПУТЕВИ СРБИЈЕ" , Београд, Ул. Булевар краља Александра бр. 282, Сектор за инвестиције, Београд, Ул. Влајковићева бр. II Бр. 953-12607 19а од 15.06.2016.године, за потребе издавања услова за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 29 (стара ознака магистрални пут М-8), деоница Аљиновићи – Сјеница, запримљеног у свом Заводу под бројем 953/1 од 24.06.2016.године, доноси

Р Е Ш Е Њ Е

I – Подносиоцу захтева, издају се услови за предузимање мера техничке заштите за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 29 (стара ознака магистрални пут М-8), деоница Аљиновићи – Сјеница, и могу се предузети према следећим условима:

1. Инвеститор/извођач је у обавези да обавести надлежни Завод о свакој промени трасе пута као и додавању било каквих нових објеката (петље, пумпе, пута базе и др.) и за те локације затражи додатне услове Завода.
2. Неопходно је присуство археолога приликом земљаних радова на дефинисаним подручјима (зона 1 и 2 на карти у прилогу) на којима је познато постојање археолошких добара под претходном заштитом везаних за саму трасу пута, односно за радове на траси. Због наведеног инвеститор је у обавези да 15 дана пре почетка радова обавести Завод како би се организовао надзор у планираним зонама. Археолог који прати радове може да пропише додатне услове у складу са ситуацијом на терену.
Попис зона на којима је неопходно пратити радове:
Зона 1 - Село Увац, лок. *Црквина и Увачко гробље*
Координате зоне за праћење: од тачке x7417190,843 y4793412,697 до тачке x74168620.229 y4793479,374
Са леве и десне стране, на делу пута дефинисаном координатама, налазе се локалитети *Црквина* и *Увачко гробље* који представљају добра под претходном заштитом. У питању је насеље са некрополом непознате хронологије, обзиром да археолошка истраживања до сада нису вршена.
Зона 2. - Село Увац, лок. *Градац*
Координате зоне за праћење: од тачке x7414265.074 y4795073,227 до тачке x7414265.074 y4795417.715
Са десне стране пута Сјеница – Нова Варош налази се брдо *Градац* на коме је могуће постојање утврђеног насеља из периода касне антике или средњег века.

3. У случају да се приликом земљаних радова на осталим деловима трасе пута појаве нови остаци археолошке материјалне културе инвеститор/извођач у обавези је да моментално обустави радове и обавести надлежни Завод.
4. Извођач је у обавези да предузме мере заштите како локалитети не би били уништени и оштећени.
5. Забрањује се неовлашћено копање, одношење камена и земље са налазишта.

-2-

6. Забрањено је несавесно прикупљање археолошког материјала.
7. Забрањује се просипање и одлагање отпадних и штетних материјала, складиштење материјала и стварање депонија на добрима под претходном заштитом.
8. Забрањује се дислоцирање и уништавање надгробних споменика.
9. Уколико се приликом било каквих земљаних радова наиђе на археолошку материјалну културу, археолог који прати радове може да их обустави и у зависности од ситуације налаже да изда додатне услове под којим се дата локација може даље користити.
10. Трошкови истраживања, заштите, чувања, публиковања и излагања добра које ужива претходну заштиту, све до предаје добра на чување овлашћеној установи заштите сноси инвеститор.

II - Инвеститор је дужан да према условима из тачке I) овог Решења сачини пројектну документацију и на исту прибави сагласност овог Завода.
III – Ово решење не ослобађа подносиоца захтева обавезе прибављања и других услова, дозвола и сагласности предвиђених прописима о планирању и уређењу простора и насеља, изградњи објеката и осталих важећих законских прописа.
IV - Ово решење важи две године од дана издавања.
V – Жалба на решење не задржава извршење овог решења.

О б р а з л о ж е њ е

Овом Заводу обратило се Јавно предузеће "ПУТЕВИ СРБИЈЕ", Београд, Ул. Булевар краља Александра бр. 282, Сектор за инвестиције, Београд, Ул. Влајковићева 19а, захтевом за прибављање услова за предузимање мера техничке заштите за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 29 (стара ознака магистрални пут М-8), деоница Аљиновићи – Сјеница.

Увидом у документацију овог Завода и на лицу места, као и на основу Извештаја број 953/2 од 05.08.2016.године, сачињеног од стране стручног сарадника овог Завода, на траси деонице Аљиновићи – Сјеница државног пута IБ реда бр. 29 (стара ознака магистрални пут М-8), није утврђено постојање културних добара, нити евидентираних добара која уживају заштиту на основу Закона о културним добрима („Службени гласник РС", бр. 71/94, 52/2011-др.закони, 99/2011-др.закон).

Међутим, на самој траси и у непосредној близини трасе пута, са леве и десне стране, на делу пута дефинисаном координатама у члану 1 диспозитива Решења, налазе се локалитети *Црквине* и *Уочамско гробље*. У питању је насеље са некрополом непознате хронологије, обзиром да археолошка истраживања до сада нису вршена. Са десне стране пута Сјеница – Нова Варош налази се брдо *Градац* у селу Увац, на коме је могуће постојање утврђеног насеља из периода касне антике или средњег века.

Планирани инвестициони радови могли би да девастирају поменута добра или приликом земљаних радова постоји могућност појављивања нових добара под претходном заштитом јер су археолошки локалитети специфични са становишта заштите, јер се налазе испод површине земље и често није могуће знати за њихово постојање, приликом било каквих земљаних радова могуће је наићи на остатке материјалне културе из прошлости, те је у том случају неопходно организовати праћење спровођења мера заштите од стране археолога Завода.

На основу чл. 36. став 1 тачка 4. Закона о културним добрима прописано је да је сопственик дужан да прибави услове за предузимање мера техничке заштите и прибави сагласност надлежне установе за предузимање мера и радова на добру којима се могу проузроковати промене изгледа, облика или намене добра или повредити његова својства.

На основу чл. 99. став 2. тачка 3. Закона о културним добрима прописано је да се мере техничке заштите и други радови којима се могу проузроковати промене облика или изгледа непокретног

културног добра или повредити његова својства, могу предузимати ако се прибаве потребни услови и одобрења на основу прописа о планирању и уређењу простора и изградњи објеката.

Чланом 109. Закона о културним добрима прописано је да уколико се у току извођења земљаних и других радова наиђе на археолошко налазиште или археолошке предмете, инвеститор радова дужан је да одмах, без одлагања, прекине радове и о томе обавести надлежни Завод за заштиту споменика културе, као и да обезбеди средства за заштитна археолошка истраживања и конзервацију налаза.

Чланом 110. Закона о културним добрима прописано је да је Инвеститор дужан да обезбеди средства за истраживања, заштиту, чување, публиковање и излагање добра које захтева претходну заштиту, све до предаје добра на чување овлашћеној установи заштите.

Са изложеног, одлучено је као у диспозитиву овог решења.

На основу члана 104. став 3. Закона о културним добрима, жалба не одлаже извршење решења.

ПРАВНА ПОУКА: Против овог решења дозвољена је жалба Републичком заводу за заштиту споменика културе у Београду у року од 15 дана од дана достављања решења. Жалба се подноси преко доносиоца овог решења, а на основу члана 16. Закона о културним добрима ослобођена је плаћања републичке административне таксе.

Обрадили:
Др Марија Марић, археолог
Љиљана Александрић, дипл. правник

В.Д.ДИРЕКТОРА ЗАВОДА

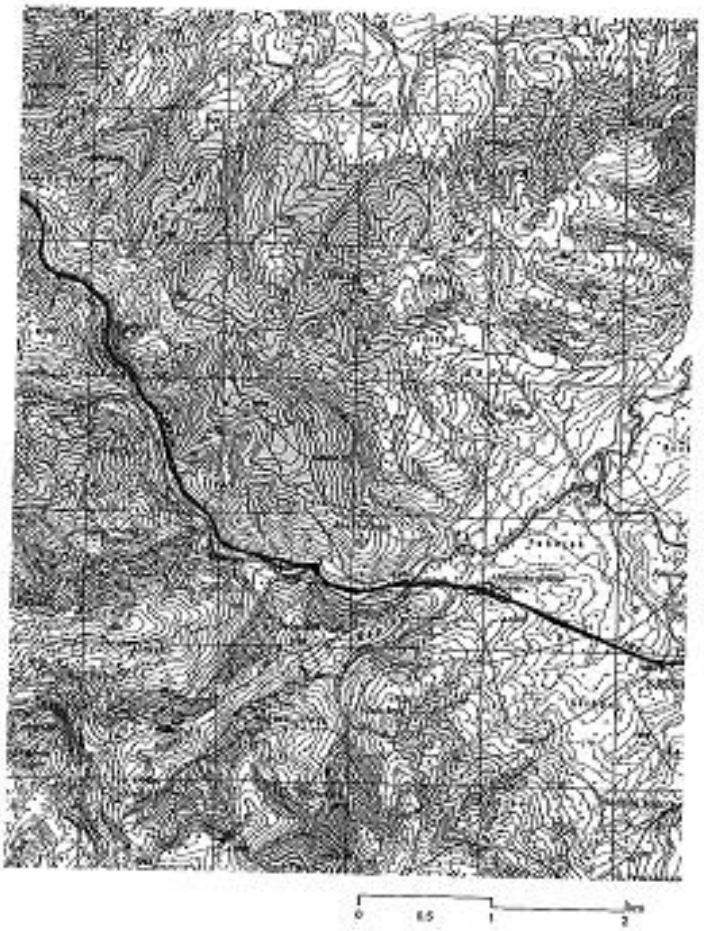
Иван Мидуновић

Доставити

- Подносиоцу захтева
- Републичком Заводу за заштиту споменика културе у Београду
- Архиви завода

Завод за заштиту споменика културе Краљево
Установа културе од националног значаја
36000 Краљево, Цара Лазара 24, тел. 036 231 865, тел/факс 036 331 025
жиро рачун: 840-69664-74, 840-69668-62 , e-mail: zzskv@gmail.com

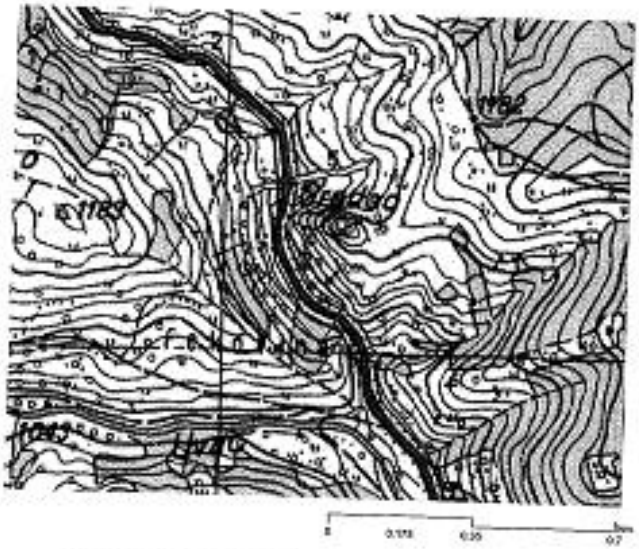
Прилози:



Слика 1. Зоне 1 и 2 за праћење радова

Завод за заштиту споменика културе Краљево
Установа културе од националног значаја
36000 Краљево, Цара Лазара 24, тел. 036 231 866, тел/факс 036 331 035
жиро рачун: 840-69564-74, 840-69658-62 , e-mail: zzskv@gmail.com

Слика 2. Локалитети Увшиско гробље и Црквина са зоном праћења радова



Слика 3. Локалитет *Градац* са зоном праћења радова